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J. J. CASSIDY, M.D., EDITOR.

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Original Contributions.

MENTAL CAPACITY IN WILL-MAKING.

BY ARTHUR JUKES JOHNSON, M.B., M.R.C.S.(ENG.)

A MEDICAL practitioner may be asked to make a will for a patient, or witness the signing of a will, or express an opinion as to whether or not a patient is in a fit condition to make a will, or from facts supplied to him, to give an opinion as to the state of mind in which a deceased person was when he executed his last will and testament.

As to making a will for a patient, though it may at times become necessary on account of impending dissolution, a medical man should never consent, if it is possible to secure the services of a solicitor, or if not even of a friend to do the work for him.

In the witnessing of the signature to a will, it should be remembered that when a medical man signs his name as a witness it does not merely mean that he thereby acknowledges that the testator really did sign the document in his presence, but rather that the testator was in a fit and proper condition to sign the will. Therefore before a medical man undertakes to make himself a witness to a will he should satisfy himself as to the state of mind of the testator. If a medical man be asked to decide whether a dying person is or is not in a fit state of mind to make a will, it is as a rule only necessary to ascertain whether the sick person can clearly and rationally answer a few questions put to him or can repeat unaided the provisions of the will he wishes to make. If a dying or sick person cannot do this without prompting or suggestion, there is, as Taylor says, reason to believe that he has not

a sane and disposing mind. At the same time it must be remembered that to render a will valid the law requires that the testator should possess at the time the will was executed "a sane and disposing mind," though interpretation of this term frequently depends upon the nature of the will itself, rather than on the mental condition of the testator at the time of making the will.

Another class of cases is that in which a medical opinion is sought as to the testamentary capacity of a feeble-minded person who is not ill or dying. In these cases much more care in examination is required, and a private interview with such a person should always be insisted on. Besides the ordinary questions put to test the mental capacity of the individual, carefully framed questions should be asked to ascertain if possible how far any undue influence has been brought to bear from without. It has happened that the patient will disclose the existence of such undue influence when treated in this way, which he never would have mentioned or even agreed to were he in the presence of the person exerting such undue influence over him.

When a will is in dispute after the death of the testator, and a medical opinion is asked concerning the probable testamentary capacity of the deceased, the inquiry becomes much more complex and searching. The points for consideration will now embrace the evidence obtained from the friends of deceased, who were well acquainted with him and his habits and opinions, and were on such terms of intimacy with him as should enable them to supply as fully as possible the data on which to form a conclusion. The evidence obtained from this source should be a reliable guide in many ways. From these witnesses we can learn whether deceased was ever treated by anyone as if he was incapable of managing his own affairs. They will probably know something of the testator's acts and correspondence, and from the actions of these friends of deceased we should learn whether they ever had any distrust of his sanity or capacity to make a deed while he was living.

The evidence to be obtained from the will itself is this: Does deceased express in it such a disposition of his estate as it is reasonable to expect he should make? We should not be surprised to find that the will of an eccentric man contains evidences of his eccentricities, which would be such as might always have been expected from him; and in this way his will may perhaps be unjust in our estimation to the near relatives or friends of the testator yet it will not necessarily be void, unless it becomes apparent that the seeming injustices in the will are due to the influence in the mind of the testator of a delusion, and that the will was made under this delusion. Proofs of such delusion should be carefully examined, as it must be remembered that what relatives assert to be delusions are sometimes found to be actual facts.

In the wills of the insane, that is, in those wills which are based on certain delusions, it will be found that they bear no resemblance to a will made by the same man before his mind was affected by

his delusion. Such a will is wholly different from what it would be reasonable to expect it would be had it been made prior to the dominancy of the delusion on which it is based.

Formerly the English law was that if there was any evidence of unsoundness of mind in the testator, it was *prima facie* evidence that he was unfit to make a will, for it was held that "the mind, though it has many and various faculties, is one and indivisible." If then one of these faculties is weak or disordered, the whole mind must share that weakness or disorder, and consequently cannot be sound. The late Sir Alex. Cockburn changed all this some years ago when he gave judgment in the will case of Banks *vs.* Goodfellow, (59, B. 549). In this case Banks, whose will was being contested, had been insane, and had been in an asylum, and though discharged at the time he made his will had certain fixed delusions. One of these was that a certain man long dead continued to haunt and molest him, another, that he was interfered with by devils who were visibly present. Added to this he had recently had a number of epileptic fits. On the other hand it was shown that at the time of making his will Banks was a shrewd, careful business man, and managed his affairs, such as they were, correctly. Sir Alex. Cockburn thereupon pointed out that a degree or form of unsoundness of mind that neither disturbs the exercise of the faculties necessary for such an act, nor is capable of influencing the result, ought not to take away the power of making a will.

It has therefore been held that the mere existence of a delusion in the testator's mind should not vitiate his act unless it can be shown that the delusion formed the ground work of the act, or that the testator's mind was influenced by such a delusion.

If the provisions of a will are just and reasonable, and the delusion does not affect those provisions, the will is usually upheld. If on the other hand the delusion bears on the provisions of the will, then the document might become invalidated.

A person may be incapacitated from making a will by unsoundness or feebleness of mind or by disease. When disease is the alleged cause the law looks to the actual effect of the bodily *disease on the mind* at the time the will was made. Bodily disease or incapacity does not affect the validity of a will unless the mind is directly or indirectly disturbed by it. As Dr. Taylor says: "Integritas mentis non corporis sanitatis exigenda est" is the rule of the courts. Thus in Harwood *vs.* Baker, not *erysipelas and fever* but the *stupor and drowsiness induced by them*, were held by the Privy Council as invalidating the will. A man's mind may not be so strong during bodily suffering as when in perfect health, but still it may be quite strong enough to enable him to make a good will, as it appears from the judgments in these cases that a state of mind for which a person might be placed under control, or even under certain circumstances be deprived of the management of his business affairs, would not render him incompetent to make a will.

A person is temporarily incapacitated from making a will by drunkenness, delirium, the stupor induced by narcotics and similar conditions. The effect upon the mind of a large number of bodily diseases has been from time to time brought forward as substantial reason why a will made by a person suffering from any of these diseases should be declared void. The following will illustrate the rule of the courts in dealing with some of these cases:

In the case of the late Mr. Bravo a will made while suffering from the effects of a violent poison was adjudged valid.

In Maxwell *vs.* Maxwell (Probate Court, July, 1872) gastric fever was held by the court as an insufficient ground of objection to a certain will. And in another case, probably of typhoid, in which there was no delirium during the day, an opinion was given that a will made in the day-time was good, and as a consequence the will was never contested.

In the case of Blewitt, 1833, paralysis was adduced as a ground of incompetency.

In the case of Day, 1838, epilepsy was alleged to have affected the mind. But in Penfold *vs.* Crawford (C.P. 1843) though the testator had suffered from apoplexy with loss of speech, yet it was shown that his mental powers were good and a deed made subsequently was held to be valid.

In Harrod *vs.* Harrod (Vice-Chanceller's Court, 1854), it is shown that paralysis is not insanity. Hemiplegia without aphasia does not incapacitate the patient from formulating and expressing thought in intelligent speech.

In the Duchess of Manchester's case, 1854, though hysteria, convulsions, inflammation of the brain and mania existed before the will was made, the will was held to be good chiefly upon the evidence of the medical attendant who deposed that at the time of the execution of the will and for some days previously she had recovered her reason.

Aphasia may interfere with testamentary capacity. In pure "motor aphasia" a patient may be quite competent to make his wishes known, as by gesture he can show his assent to or dissent from any proposition.

In "sensory aphasia" there may be no means of ascertaining the desires of the patient, the channels of communication to the mind being blocked. In cases of "complete sensory aphasia," the individual is not competent to make a will, but in partial cases where either the channel of communication through the eye or ear remains intact the desires of a person might find expression.

In the case of Delafield vs. Parish, Henry Parish a cultivated and refined gentleman, in July, 1846, was stricken with paralysis, described by the physician as hemiplegia. In 1842, while in perfect health, he had made a will. After the attack of 1849 his wife was hardly ever absent from his presence, she and her relatives excluding and taking the place of his relatives with whom up to this time he had always lived on terms of cordiality. In August,

1849, September, 1853, and June, 1854, codicils were made to the original will, which gave to his wife properties deeded to his brothers and sisters in the will of 1842. It was claimed that during all the period after his attack of paralysis down to his death in March, 1856, he was unable to speak intelligibly or coherently or to read or write, and that he frequently indecently exposed his person, and was guilty of ungentlemanly and violent conduct and could only indicate his wishes by gestures and peculiar sounds.

In the judgment Judge Davies laid great stress upon the entire change in the personal habits and character of the testator, and held that the attack of July, 1849, "obliterated the mental powers, moral perceptions and refined and gentle susceptibilities of Henry Parish, and that he was no longer an accountable being."

HIP DISEASE.—A CLINICAL LECTURE.

BY B. E. M'KENZIE, B.A., M.D.

(Continued from last month.)

THE diagnosis of hip disease is as difficult in some cases as it is easy in others. When the disease is far advanced no skill is required to determine the fact, whereas in incipient cases the disease may exist for a considerable length of time without detection. It is also true that there are many affections which simulate hip disease very closely. It will be our duty now to distinguish between some of these affections and hip disease.

1. Sarco-iliac disease. This disease is not common but produces lameness, of course, and pain may frequently be referred to in the same region as in hip disease. It also causes flexion of the femur. Local examination, however, will enable you to determine in most cases the location of the lesion. Pressing toward each other the iliac crests is likely to increase some of the symptoms complained of, whereas it would not in the patient with hip disease. Of course the two may exist together, but if it be remembered that sarco-iliac disease is comparatively infrequent and if careful local examination be made you will not fail in making a diagnosis.

2. Disease about the colon or cæcum. Several cases are reported where men of note have fallen into error because of the deformity, the elevation of temperature, the inability to use the limb and the swelling in the immediate proximity of the hip joint. You will readily see that where the inflammation exists about the cæcum flexion of the femur will bring about a condition simulating that of hip disease. We have learned that hip disease is apt to be rather vague in its history, whereas the inflammation about the cæcum, causing flexion of the femur, is likely to be much more acute. There is higher temperature, a greater general disability

and the symptoms from the first are much more pronounced. Careful local examination, as in other instances, will greatly assist in arriving at a correct conclusion.

3. Infantile paralysis. The instances where a mistake could be made must be comparatively few. Yet, occasionally, instead of having increased mobility of the hip joint the mobility is greatly lessened. There may be flexion and adduction or abduction and atrophy of the limb with lordosis. Under these circumstances it is occasionally necessary to make a careful distinction. The history of the case, however, with the local examination of the joint, ought to reveal the nature of the affection.

4. Traumatisms which may have produced fracture or dislocation occasionally lead to error. A few of these instances I have seen. It is difficult to determine sometimes whether inflammation of the joint may not have resulted in consequence of an injury. A careful analysis, however, of the circumstances attending the accident, careful measurement of the length of the extremities together with the subsequent history, in most cases will enable you to reach a safe conclusion.

5. Hysteria. This is, perhaps, the most difficult of all. There is recorded at least one case examined frequently by two leading physicians, sometimes the examinations having been made separately, and sometimes the two having examined the case together. At times they thought there was hip disease, at others that the manifestations were hysterical. Death from an intercurrent affection revealed the fact that there was disease at both hips. The classic symptoms which mark hysteria may be confidently looked for and some of those which mark hip disease will certainly be found absent. In this case the discernment of the surgeon is sorely taxed to arrive at a reliable conclusion.

6. Sciatica. Not infrequently I have seen a well marked case of hip disease which had been pronounced sciatica because of the prominence of pain in that nerve as a symptom. Careful attention to the typical symptoms of the disease will prevent such a mistake.

7. New growths at the upper end of the femur or in its vicinity. The cases of this kind that have come under my notice were due to sarcoma, either of the pelvis or the upper end of the thigh bone. In these there was no real difficulty in making a diagnosis. I can readily understand, however, that cases may easily be found where the difficulty would be considerable.

8. Bursitis in the vicinity of the joint. Some time ago I was asked by a physician to see his little girl, who, he said, had hip disease. I found that the history dated back only some two or three weeks. Flexion and adduction were strongly marked, and temperature high. At the time of the first examination I expressed the opinion that there was an acute epiphysitis or a bursitis. Watching the case for some time, and having the child kept at rest and following the ordinary indications for treatment, the trouble speedily subsided and we reached the conclusion that her trouble

arose from inflammation of the bursa under the psoas. Sometimes something similar but producing a different deformity may arise from inflammation of other bursæ about the joint, particularly under the gluteus.

9. Inflammation of the great trochanter cannot properly be said to be hip disease, although by its continuance it may produce that condition and the symptoms arising from it may easily be confounded with those of that affection. The error would not be a serious one as it would probably be wise to treat the case much as if it were disease of the hip joint except in this, that operative interference is much more likely to be called for early in the case.

10. Psoas abscess. In disease of the vertebræ pus may form and find its way into the sheath of the psoas, giving rise to flexion of the femur, limitation of motion, lameness, etc. There may be much difficulty in determining the actual condition present. A knowledge, however, of the disease of the vertebræ and attention to local symptoms at the joint will generally enable you to reach a safe conclusion. Occasionally disease of the last dorsal or lumbar vertebræ may give rise to similar symptoms where no pus is present.

11. Disease of the knee. So constantly is there found pain at the knee when the hip joint is affected that the mistake has been made, not infrequently, of treating the knee when the hip was the seat of the lesion.

12. Congenital dislocation of the hip. This is by no means a common affection, and yet I am greatly pleased to be able to show you a typical case to-day. They are likely to be presented to a man in general practice who has never seen one before, and finding the patient walking as this little girl, that is, with a distinct limp, and finding the limb smaller and shorter as it is seen to be here, it is scarcely surprising that a diagnosis of hip disease is frequently made. If you watch this girl as she walks across the operating room, you will see that the upper end of the femur rides upward on the pelvis when her weight comes upon the right leg. The amount of shortening is an inch, so that the head of the femur is not in the acetabulum and is left without any bony anchorage. There is no disease present, but the femur by traction can be made to move through a space varying from one-half inch to two inches in most cases.

It is so plainly manifest in the case that is before you that it seems surprising that the mistake should be made, but if you will simply bear in mind what you have seen here, and recall the fact that there is no history of disease, you will not fall into the error referred to. There is one misleading feature in this case to which I wish to make reference. The fact that the junction of the femur with the illum is not a definite secure joint, and that the upper end of the thigh bone pushes up against the muscles at every step, causes more or less traumatism; and consequently after a long walk or other considerable exercise pain and stiffness are likely to

be found present and may further add to the difficulties of a diagnosis. The increased mobility upward and downward of the femur is almost pathogomonic and is in marked contrast with the conditions present in hip disease.

In advanced cases the deformity is generally very marked. It has already been stated that some flexion of the femur occurs early. At the same stage of the disease abduction and external rotation are commonly present. When the disease is far advanced the flexion is generally much greater, especially in children, and instead of abduction, adduction is generally found present. It will pay you well to give close attention to this part of our subject as an aid to the right understanding of the principles involved in the mechanical treatment.

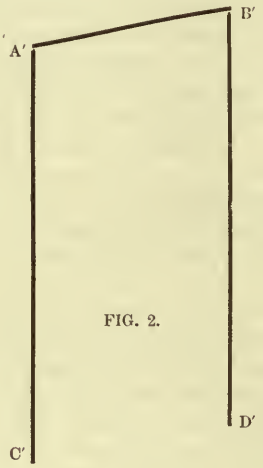

FIG. 2.

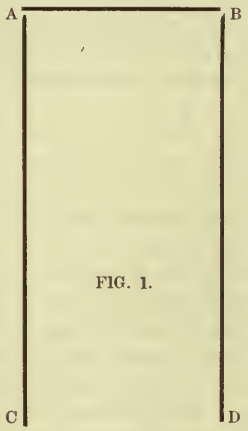

FIG. 1.

Assume that A C and B D—Fig. 1, represent the extremities extending from the acetabular cups, A and B, and that A is the diseased hip, and that abduction occurs so that the angle B A C becomes an angle of 120°. Now when you recall the clinical fact that there is lessened motion, or none, at the affected joint, you will understand why the leg, A C, cannot come into a position convenient for walking until the hip comes down to the position A′ and the other hip comes to the position B′. This causes the tilting of the pelvis, the curvature of the spine and apparent lengthening of the affected limb so commonly observed in early hip disease.

When adduction takes the place of abduction, then the limb of the affected side will be apparently shortened instead of lengthened.

It is very important to bear in mind that adduction occurs in nearly all cases as the disease progresses, whether toward recovery or not, as this will afford a reason for extending the affected limb and keeping it in a condition of apparent lengthening, by the means of treatment adopted. The very exaggerated deformity which is often seen to follow in old cases might often have been wholly, or

in part, prevented by attention to this matter while under treatment. When once recovery has resulted, mechanical means are no longer available to rectify the deformity, and operation must be resorted to.

The treatment of hip disease must be directed largely according to indications. There are, however, certain well established facts and certain principles of treatment which must prevail in all cases.

Rest for the affected joint may be considered the first desideratum. How to secure it may be a matter of great difference of opinion. If the symptoms be acute and there be much deformity, it is well to put the patient in bed for a few weeks and use carefully adjusted extension. During this time a splint may be made so as to have it ready when the deformity has been corrected and the tenderness has subsided. I consider the splint shown you here —a Thomas splint, which I have so modified as to afford means of extension—as a most useful mechanical aid in keeping the joint at rest and enabling you to keep traction on the affected limb. It should be made to fit accurately, and the parts should be sufficiently rigid to prevent any movement at the joint. A cork-soled boot, made to elevate the patient three or four inches, is worn on the sound side so that when standing the bottom of the splint and the sole of the boot may be in the same plane. Though the patient can walk when thus fitted up, yet walking without crutches is to be discouraged as tending to keep the affected limb in a condition of unrest. It may be said that remaining for a long time in the erect position, even when crutches are employed, is unwise as favoring a retardation of the lymphatic and general circulation. A splint should not be regarded as a means by which the patient can resume the ordinary activities of life. It has performed its function well when, in addition to securing rest for the affected part, it has enabled the patient to avoid the invalidism implied by confinement to bed.

Constitutional treatment is important. Here the same principles should govern as in other forms of wasting disease.

Under the guidance of the plans advocated, a certain percentage of cases go on uninterruptedly to recovery, and some recover so completely that one cannot detect a limp or other disability.

Should the disease still make headway and fluid be found in the joint, one must operate. Having once opened the joint, the question arises as to whether one should excise the head of the femur or not. If no necrosed bone be readily found, I prefer to content myself with cleansing with the finger or curette as thoroughly as possible, and treating the open wound aseptically. In this manner I have often secured a good result. If carious bone be found, it must be removed; though it is wise still to leave the joint intact if possible. If there be good reason to suppose the acetabulum diseased, then one should excise.

There is at least one strong reason against early excision, viz., that the patient is thereby hopelessly maimed. The case thus early

consigned to such a fate might have been among the number who recover with good joints.

While I wish to advise you unequivocally against early excision, I do not wish to be understood as advising against early operation. If careful local examination reveals the presence of a focus of disease which may be reached without entering the joint, I think it should be removed.

After operation, the mechanical and constitutional treatment are of just as much importance as before.

12 East Bloor St., Toronto.

EPITHELIOMA OF THE EXTERNAL EAR.*

BY F. N. G. STARR, M.B.(TOR.),

Lecturer and Demonstrator of Anatomy, University of Toronto; Surgeon to the Out-door Department Toronto General Hospital and Hospital for Sick Children.

DURING the last week in May, 1897, I saw my first case of epithelioma of the pinna. It occurred in a man aged fifty-eight years, and was referred to my Surgical Out-door by Dr. McPhedran, from the Skin Clinic at the Toronto General Hospital. Nearly a year before the patient had first noticed what he took to be a small pimple on the outer edge of the external ear. It gradually became larger and thicker, and in the course of a few months the surface became raw. It continued to increase in size until I saw him ten months after he first observed the "pimple." There was then a mass of thickening about the middle of the edge of the helix, taking up nearly a third of that part, and extending across the antihelix down into the bottom of the concha. The surface of the thickened mass was more vascular than the surrounding skin. The external surface of the mass was ulcerating, and presented somewhat everted edges, as will be seen in Fig. 1. There was no pain.

On the 3rd of June, 1897, just one year ago, I cut out a V-shaped portion of the auricle, including the growth, carrying the apex of the V well down into the bottom of the concha. The raw edges were then brought together and two silk-worm gut sutures put through the cartilage some distance from the edges to prevent tension. A continuous horsehair suture was then used and the skin edges were carefully brought together. Union took place rapidly, but to be on the safe side the silk-worm sutures were left in for three weeks. Fig. 2 is a photo taken eight months after operation. There is at present—a year after—no sign of recurrence.

Case 2 was that of a man aged eighty-two years, upon whom I assisted Mr. I. H. Cameron to operate in June, 1897, about a week

* Read at meeting of Ontario Medical Association, 1898.

after my own case. In this patient the growth affected the base of the lobule, extending into the fossa of the antihelix, and involving the antitragus. It was not painful. It was removed, and the lobule sutured to the remaining part of the pinna. A good recovery ensued, but of late I have lost sight of the patient, and at the time I was unable to have a photograph.

Case 3 was that of a man aged eighty-four years, who came to the Out-door Department of the General Hospital, in June, 1897. There was a large cauliflower-like, fungating mass, about the size of a pigeon's egg, presenting at the external auditory meatus. It apparently had commenced in the concha, and now completely filled that part, protruding considerably beyond the level of the external ear. There was a great deal of pain and tenderness. The growth had existed for over two years. He refused operation, and

No. 1. Before operation.

No. 1. Eight months after operation.

before I could arrange to have a photograph taken, he died of an intercurrent affection.

In passing, I may say that before this wonderful month of June, 1897, was completed, I saw another old man on the street whom I believe presented a similar condition, namely, a fungating mass about the size of a filbert, apparently springing from the helix. I regret to say that my professional dignity would not permit me to make a further investigation of the case.

My reason for placing these cases on record is because I believe the disease in this location to be comparatively rare, for in an undergraduate and post-graduate experience of thirteen years I had never seen a case until the first of this series presented itself. Barr of Glasgow says the condition is very rare. Marmaduke Shields in Treves' System merely refers to it, but gives the figure of a case resembling Case 3 in my series very closely. Erichsen does not mention the condition. Gruber and also Schwartze agree

that epithelioma is more likely to occur in people who have suffered for years from a purulent otitis. It is interesting to note that in none of the cases related was I able to get a history of "running ears." Gruber says that the disease begins either by a gradual alteration in the character of warty growths, which have already existed for some time, or by the appearance in the skin or subcutaneous tissue of one or several hardish nodules. After an interesting account of the disease in this locality, he says: "Early excision of the diseased parts is particularly indicated with the auricle, as experience shows that even after its complete amputation the wound heals tolerably quickly, and that the operation generally results in a radical cure."

THE SUMMER AND HEALTH RESORT AREAS OF ONTARIO.*

BY E. HERBERT ADAMS, M.D., TORONTO.

It is not my intention in this paper to make a comparative meteorological or topographical study of the various summer and health resort areas of the Province of Ontario, but merely to emphasize to my professional brethren, in a general way, the importance of developing the health resorts, mineral springs and watering places of this great summer land of ours.

If this paper serves to awaken some thought and enterprise in this direction, among the medical men of the Province, its object will be accomplished.

While learned treatises have been written on the climate of almost every other section of the globe, but little attention has been given to the climate of Canada, and what has been written has been very often misleading, when it has not been absolutely inaccurate.

The entire Province of Ontario is one vast summer resort area. Containing, as it does, over 50,000 islands and thousands and tens of thousands of lakes and rivers, this region presents an unsurpassed natural variety of scenic wonders and opportunities for healthful varieties of sport, recreation, and amusement.

The proximity of such large bodies of water as the great lakes render the summer climate equable and delightful, and ozone-ladened breezes from the immense pine forests of the northern highlands are wafted southward to meet the purified atmosphere of the balmy breezes of the great lakes.

There are practically no unhealthy localities in the Province, and no diseases such as malaria and hay fever, due to climatic influences. Sunstroke is almost unknown in this region. Ontario

*Read before the Ontario Medical Association, 1898.

can boast of as many different climates as any other country in the world. In the summer season, especially, a greater variety of natural health and pleasure resorts cannot be found in any other country.

There are many well-patronized resorts in the United States, Europe and elsewhere, which have but a small proportion of the natural requirements for health or pleasure resorts, as compared with some of our comparatively unknown districts.

There are health resorts in the United States that have hundreds and thousands and tens of thousands of tourists and health-seekers domiciled there for many months of the year, and yet they are vastly inferior in climatic, scenic, sanitary, and other advantages, to some of our Canadian resorts.

Some of these places across the border are simply the boom towns of enterprising Yankees, and owe their popularity almost solely to advertising, or to the success of a well managed, fashionable hotel.

And yet you will frequently observe Canadian physicians recommending Canadian patients to travel long distances to such inferior places many of which, from the sanitary aspect, are mere death traps. Many of these places, for instance, are infested with the germs of tuberculosis, the hotels, boarding houses and public places having been for years the resort of consumptives, and with the very lax southern methods of sanitation little or no precautions have been taken for the isolation and destruction of sputa. How often are convalescents from typhoid, pneumonia, rheumatism, lagrippe and other exhausting diseases, sent to these resorts by physicians whose knowledge of the climate, etc., is not based on actual travel, but on book-lore, and too often on the too glowing accounts of persons financially interested in that special health resort.

How much more frequent do you hear Canadian physicians lauding the virtues of Denver or Switzerland than they do those of Banff, Kamloops, Calgary, or other points in our own Canadian Rockies. How much more often do they extol the virtues of the White Mountains, Catskills, or Adirondacks, than our own Muskoka and Georgian Bay region.

How much more frequent do they recommend the seaside resorts of the United States than those of our own land.

Our resorts are not without esteem, save in our own country, for visitors from across the border know how to appreciate these resorts when once they discover them. Several hundred people from the neighborhood of the city of Pittsburg, Pa., spend their summers in Muskoka, while New Orleans, Memphis, Chicago, New York, and other large cities, have a nucleus of visitors there, which is rapidly increasing as the knowledge of the region spreads, and yet there is not enough faith or enterprise on the part of Canadians to put up one first-class fashionable hotel in the entire district.

What is the financial aspect of the question? It simply means

that Canada is losing millions of dollars every year by not giving prominence to the development of its health resorts.

A great many millions of dollars are spent every winter in the southern States by tourists and health seekers from Canada and the northern States, and there is no reason why we should not have reciprocity in this respect at least, and have millions of dollars come north to us during the summer months, from tourists and health seekers who find the south unsuitable for summer abode.

Any one who is familiar with popular health resorts would be surprised at the wealth of many of the people who visit such places. It is the wealthier classes who can afford to travel and in a small health resort in the south will often be found the representatives of more millionaire families than can be found in almost any Canadian city. These people spend a great amount of money, and often, too, make not inconsiderable local investments.

These health seekers and tourists from other lands make a desirable class of patients for the physicians, as they are generally well able to pay for the most skilful of attention.

It is both directly and indirectly, therefore, in the interest of the physicians to pay more attention to the health resorts within our borders, and when recommending a health or summer resort elsewhere, let us first make sure that there is not an equally good one nearer home.

It would be a good thing for this country if our Government would do as the United States has been doing, *i.e.*, undertake a systematic investigation of the subject of climate and its influence on health and disease.

The question of Canadian climate has never yet been handled properly by the Dominion Government. Our climate has been misrepresented for years both at home and abroad and little or no practical efforts have been made to counteract these wrong impressions. So strongly rooted are false impressions of our climate, even among Canadians, that some of our most intelligent citizens fancy I am romancing when I describe some of our comparative climatic advantages, the knowledge of which should be in the possession of every school boy.

This country will never progress as it should until these misconceptions of our climate both at home and abroad are cleared up and therefore a strong government policy should be adopted in reference to measures which will tend to produce this result as speedily as possible.

One reason why, says Prof. Roberts Austin of the Royal Mint of England, in his recent lecture in Toronto on Canada's metals, greater British efforts have not been made in the direction of developing our mineral resources is on account of misconception of the Canadian climate.

I am satisfied myself that climatic advantages are a loadstone for immigration, and that not even gold itself will have as much

effect in the permanent settlement of our country as will a thorough knowledge and advertisement of our climatic advantages.

A comparative practical study of our climatic resources is one of the first and fundamental measures which should be adopted for the encouragement of immigration. We are beginning wrong by sending out agents imperfectly acquainted with our climate, and I have never yet, not even in the Meteorological service of the country, found a man but seemed to have some unfavorable impressions of our climate which were not founded on fact. Though I have been studying and discussing this question of climate, both at home and abroad for many years as a medical climatologist, the more I study the subject the more I am surprised at the comparative climatic advantages which we possess over countries and localities with world-famed reputations as to climate.

In reference to the settlement of the districts of Muskoka, Parry Sound, Algoma, etc., it seems to me that in the light of our present knowledge of these localities as health and pleasure resorts, that to a large extent at least the proper settlement of these districts consists not in attracting the poorer classes of England but in attracting what I may term summer migrants or summer visitors from Europe and the United States, but more particularly from the Southern States. These people are always of the well-to-do and often of the wealthiest classes and leave their money in the district without taking away anything save renewed health and increased weight and pleasant recollections. They buy their provisions in Canada and employ Canadian labor in administering to their pleasures and wants and in building summer cottages, etc. Bring these people of wealth and leisure to these districts for a few months of the year and they will leave sufficient money in the country to support the permanent settler and the latter will come of their own accord or with but little direction on the part of the Government and will be of a class which will be suitable for the district.

The settlers around the principal lakes of Muskoka, though on the average among the poorer type of immigrants, have in the past ten years been more prosperous and their farms have increased more in value than the farmers in what are considered the best farming districts of Ontario. There are settlers in Muskoka who are neither progressive nor industrious, who perhaps are rather detrimental to the district on account of their bad habits and supposed depredations, who ten years ago were worth nothing and yet to-day they have a market at their doors and city prices from the tourist and summer cottagers for their labor and farm productions and their farms with their eligible points for cottages on the lakeside have become very valuable. Many of these people on the shores of the three great Muskoka lakes can show an average increase in the value of their land and buildings of $500 a year in the past ten years, and others who have started boarding-houses and hotels can show a very much larger increase. Can the same be said of the average Ontario farmer? On the contrary the

settler in other parts of the Muskoka district as yet unfrequented by the summer visitor is still gaining a precarious living and there is little or no improvement on his property or in its value.

From the vicinity of Pittsburg, Pa., alone I know of several hundred people who have annually spent a few months in Muskoka and Georgian Bay district. Many of them are millionaires or very wealthy people, and have built summer cottages and with their families are prominent summer residents. Why should there not be several hundred people from every large city of Southern and Central United States. I have met representatives from all these parts in Muskoka and they are universal in their praise of the natural attractions of the district. This district, with its thirty thousand islands and thousands of lakes, is one of the greatest natural health and pleasure resorts of the world, and there is room for a million such summer visitors, and under proper management by the Government there could still be good fishing and hunting.

There is no reason why this district should not be as thickly populated in the summer by this class of people as is Florida in winter.

To those who travel for the sake of fashion as well as pleasure the undeveloped condition of the majority of our as yet comparatively unknown Ontario resorts presents few charms, and yet these gay butterfly travellers are among the wealthiest and most desirable classes and the element of fashion should be introduced together with improvements in our hotel system in order to attract this class.

Many wealthy invalids and others spend their winters in the south and their summers farther north, and to these there are no better places to get a summer temperature which is somewhat akin to the winter climate of Florida and the Carolinas than by coming to the resorts of Ontario. Indeed, by wintering in Florida and summering in Ontario, an equable all-year-round temperature is obtained, for portions of Ontario in summer possess a very similar climate to Florida in its fashionable winter season.

The untravelled citizen of Ontario knows not the comparatively great summer attractions of the well watered country and varied landscape and healthful climate of his Province; but those who have travelled the world over and have visited the leading and most fashionable health and pleasure resorts of the universe come back to Ontario convinced after all that in their travels over mountain, sea and plains there are few if any places that are better all-round abiding spots in summer for health, pleasure and climate than are the islands, lakes and rivers of the Province of Ontario. With this latter class and with the physicians of Ontario must rest largely the responsibility of directing public attention and enlisting the aid of capitalists and awakening a proper interest and co-operation for the development of the climatic resources, mineral springs and summer watering-places of the Province.

THE BOOT AS AN ORTHOPEDIC APPLIANCE.*

BY H. P. H. GALLOWAY, M.D.
Orthopedic Surgeon Toronto Western Hospital.

HERE and there in orthopedic literature are to be found references to the necessity of using boots of suitable shape and modified construction in the prevention and treatment of certain conditions of disability and deformity. It may be doubted, however, whether the subject of boot construction has received as much attention as its importance deserves, and whether the power of variously modified boots to serve some of the purposes of orthopedic practice is as fully appreciated as it ought to be. In my own practice I find certain forms of boots quite as indispensable as any other kind of appliance. A large proportion of patients who present themselves are in need of advice concerning the clothing of their feet, although they are not always aware of the fact; and were I deprived of the advantage to be gained by the use of some of the boots shortly to be described I should often feel sorely perplexed. At the outset, however, I desire to disclaim any expectation of saying anything startlingly new or original. I hope, rather, to excite fresh interest in an old subject, to show some patterns of boots that may differ somewhat from those ordinarily employed, to point out certain defects in construction, and to direct attention to the possible advantage of a more extended employment of the boot as an orthopedic appliance.

In nearly all works on orthopedic surgery, in connection with the treatment of flat-foot, it is recommended that the inner side of the sole and heel of the boot worn by the patient be built up higher than the outer side. We are indebted to the late Hugh Owen Thomas, of Liverpool, for this valuable suggestion. His plan, which is that ordinarily followed, was to not only raise the inner border of the sole and heel, but, at the same time, to fill up the space beneath the shank, which corresponds to the arch of the foot, to the same level. In doing this it is important to so build the boot as not only to make the sole thicker at the inside, but, at the same time, to project it inward. By this means a broader foundation is placed under the patient, and we gain support and leverage so acting as to raise the inner border of the foot and assist in overcoming that pronated position which is now recognized as often more concerned in the production of the symptoms of flat-foot than mere flattening of the arch.

In dispensary practice, and for patients who are regardless of appearances provided they obtain relief, this modification applied to the Waukenphast or other common-sense boot answers tolerably well; but in private practice we meet with many cases of weak

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feet in patients, especially young women, who cannot be persuaded to wear anything that departs so far from the conventional. All orthopedic surgeons are aware of the necessity of carefully inspecting the feet as an important part of the routine of examination in cases of scoliosis. In my experience this inspection reveals a pair of weak, pronated feet in the majority of cases; and although symptoms pertaining to the feet may not be complained of, I feel that it is next to hopeless to begin treating the deformed spine without first putting the patient upon a more secure foundation. In many cases the condition of the feet is obviously due, in part at least, to the fashionable boots, with narrow soles and high heels, which the patient has just removed to permit of her feet being

Fig. 1.

examined; and to attempt to treat by developmental methods a case of scoliosis or of flat-foot while the patient is perched upon a pair of boots which afford no security and make it impossible for the feet to be used to the best mechanical advantage is indeed a discouraging task. But while many patients, especially ladies of the better class, cannot be persuaded to wear boots as clumsy-looking as the ordinary pattern of flat-foot boot, the benefit of the raised and projected inner border can be secured by the modification of the ordinary plan of construction, shown in Figs. 1 and 2. In general, the last upon which this boot is built differs from an ordinary last chiefly in having a straighter inner border, in greater width, and especially in having a very broad and flat sole. The heel of

the boot is much lower and larger than usual, and its inner side widens out laterally as it approaches the floor, while its inner border is not only built up higher than the outer, but is continued farther forward beneath the shank; the inner side of the sole just beyond the shank is correspondingly raised and projected inward. By this plan of construction the same mechanical effect is secured as if the whole inner side of the sole, shank and heel were a solid mass of leather as in the ordinary form of flat-foot boot; while at the same time the boot is not only lighter than it could be if the arch were filled up with leather, but the departure from the conventional appearance is relatively so slight that it is very exceptional to meet with patients of any class who refuse to wear it. On the inside of the boot there is a strong counter of leather, of about the same size and shape, and occupying the same position in relation to the foot as the inner flange of a Whitman flat-foot brace. It gives some support to the foot at its weakest part, and, which is still more important, by exerting pressure in this situation, it serves to remind the patient of the necessity of holding up

Fig. 2.

the inner side of the foot by muscular effort. As Dr. Whitman himself teaches, this function of the brace devised by him is a much more important one than is its action as a pure mechanical support. Of course, being made of yielding leather instead of unyielding metal, this counter is not expected to serve as a substitute for Whitman's brace in cases of a severe grade; but many of the slighter cases of flat-foot can be successfully managed by suitable exercises, training in the use of the feet to the best mechanical advantage, and the wearing of suitable boots; in these cases the addition of the leather brace I have described is of considerable value.

The mechanical principle involved in the construction of the flat-foot boot may with great advantage be applied in the making of boots to be used with or without braces in cases of valgus resulting from infantile paralysis. Very frequently the paralyzed limb is considerably shorter than its fellow, and in such cases the first point in the mechanical treatment should be the providing of a suitable boot, with a sufficient amount of cork to make up the

deficiency in length; but instead of making the upper and lower surfaces of the cork parallel, and its sides perpendicular and symmetrical, as is usually done, it should grow gradually thicker toward the inner side so as to be from one-fourth to one-third of an inch higher than at its outer margin. Its inner side should also slant decidedly from above downward and inward. Fig. 3. A boot so constructed answers most admirably in many of the slighter cases of valgus resulting from infantile paralysis, and will often prove to be the only thing of the nature of a mechanical appliance required. It should be a principle in orthopedic practice never to use braces of any kind if it is possible to get along as well without them; but when the interest of the patient demands the employment of a mechanical appliance it should always be the simplest that will answer the purpose. More or less pressure and constriction are inseparable from the use of most forms of orthopedic apparatus; this constitutes a serious objection, because it means interference with the nutrition and development of tissues which are frequently already atrophied and weak; and although this disadvantage may be unavoidable we should seek to reduce it to a minimum. In the class of cases under consideration, should any of the appliances usually employed to hold the foot in its proper relation to the leg be necessary, they can as easily be attached to the cork boot just described as to one of ordinary construction, and the efficiency of the brace will by this means be greatly increased.

Fig. 3.

We will now turn our attention to a couple of boots in the construction of which the mechanical principle involved is exactly opposite to that of the flat-foot boot. The first is a club-foot (*equino-varus*) boot. It is not, however, designed to correct the deformity, but to assist in preventing relapse after the foot has been fully corrected or over-corrected by operative means. The last is of such shape that the front part of the boot is bent outward at a point corresponding to the medio-tarsal joint. The heel counter is very firm and an additional brace of stiff leather at a point corresponding to the first metatarso-phalangeal articulation affords a point of counter-pressure and serves to keep the foot from assuming the varus position; while the rolling downward and inward of the outer border of the foot is counteracted by having the outer side of the sole well built up and

projected a considerable distance beyond the upper. Fig. 4. By this construction considerable leverage is gained and every step of the patient forces the foot in a direction opposite to that which it is disposed to assume. This boot, the invention of Dr. B. E. McKenzie, is a simple and valuable adjunct in the successful after-management of club-foot. Also, in the treatment of cases of paralytic club-foot it will be found very useful; and should a high sole be desirable on account of shortening, the plan of constructing the cork with its outer side projected and elevated should be adopted. The boot so built will supply all that is necessary in the way of apparatus in many cases; while if a brace is required it will serve much better if attached to a boot of this form than to one without such modification. These modified boots will, however, fail to accomplish their purpose unless the shoemaker succeeds in so building the sole that it will touch the floor in its entire breadth when the whole surface of the heel is in contact with the floor. It is useless to project the sole and build it thicker on one side than the other if it is made so convex that all the weight comes upon a small area at about its middle. Shoemakers invariably fail to grasp this point, and even in repairing they seldom succeed in restoring the original form, until they have been specially trained.

Fig. 4.

Just here I wish to say a few words about the construction of ordinary cork-soled boots; I mean those which are intended simply to supply a deficiency in the length of the limb upon which they are worn. Pattens of some kind are constantly needed in orthopedic practice, and those made of cork are perhaps as free from objection as any other; and while the shoemakers have acquired some success in devising models of high-soled boots which are as far as possible unobjectionable in appearance, many of these serve the purpose for which they were intended very inadequately. There are five chief faults with the ordinary cork-soled boot.

1. The shape does not correspond to the shape of the foot.
2. The sole is too narrow.
3. The sole is convex from side to side.
4. The heel is too small.
5. The shank is weak and unsupported.

Of these faults perhaps the most serious are the narrow and convex sole, and small heel. In my office I have often taken one

of these boots, which a mother had just removed from her child, and placing it upon my desk have with a slight touch set it rocking from side to side like a cradle; and have pointed out that the sole of the boot in front of the shank resembled a portion of the surface of a globe, only a very small area coming into contact with the floor; while the high, slender heel, with its sharp margins worn off, formed a mere prop under the back part of the foot. Watch a patient standing in such a boot, and you will easily observe that in effect he is poised on the rounded lower ends of two small columns. Such a condition of affairs would be bad enough with the locomotor apparatus of the patient in every way normal; but the very fact that a patten is necessary is proof that there is some defect in this apparatus; consequently there is increased reason for so constructing the high boot that it will form a secure and reliable foundation for the limb upon which it is worn. Should such a boot be necessary because of some antecedent disease which has left one limb shorter than its fellow, how is the short limb to do its full share of work, if, already more or less disabled, it has to suffer the additional disadvantage imposed by a boot which is liable to roll and wabble at each step of the patient? Or, if worn upon the sound limb, with the object of elevating it to a sufficient height to prevent its disabled fellow from coming into contact with the floor, it is still more necessary that it should afford reliable support, with no disposition to sway unsteadily; for in this case the patient bears all his weight either upon the sound limb alone, or upon a splint and the sound limb, and a splint is by no means equal as a support to a healthy leg and foot. Hence in constructing a cork-soled boot, particular attention must be paid to having the sole broad and flat so that its entire width shall come into contact with the floor; the heel also must be large and perfectly flat. From its upper surface, where it is attached to the upper of the boot, the cork should grow wider as it descends to the sole, thus giving it increased breadth of base and making the patient more secure, on the principle that a stool with diverging legs is less liable to topple over than one with legs which are perpendicular. Fig. 5.

If the height of the patten required is an inch or less it is possible to construct the boot satisfactorily by adding the necessary amount of cork to that part of the sole in front of the shank and increasing the height of the heel to a corresponding extent. The appearance of the boot so constructed is preferred by some patients, especially ladies. A thin cork elevation may even be put wholly inside the boot, but if more than an inch of added height is required it is decidedly preferable to have the cork extend over the whole area of the sole, and to build upon the cork a low, broad, flat heel of leather. To put from one to four inches of cork upon the front of the boot, and on the back part a heel of corresponding height, with an unsupported shank between them, is a bad mechanical arrangement, and in the writer's opinion can hardly be defended even from cosmetic considerations. A boot with a solid foundation

under it of from one to three or more inches in height may be objectionable because of its heavy and bulky appearance, but scarcely less so than one in which the shank is cut away so as to leave a high, narrow heel, which looks like a mere prop under the back part of the boot, while the latter has the additional disadvantage of affording an unreliable and shifting foundation; for in a boot of this design the unsupported shank yields more or less and forms a kind of hinge between the elevated sole and heel. A judicious compromise between these two plans of construction, which is perhaps free from the objections attaching to both, is to cut away part of the cork beneath the shank, enough to form a respectable arch without entirely divorcing the raised sole from the high heel; so built the shank will still be sufficiently rigid, while the heel will not have the appearance of a prop.

Fig. 5.

The boots before described are for use only after conditions of deformity or disability have set in. But as at least one of the pathological conditions above referred to as requiring in its treatment a boot of special construction, namely flat-foot, is largely caused by injury to the structure and function of the foot inflicted by the badly-designed boots that are commonly worn, the consideration of prophylaxis arises, and it becomes a pertinent question:—"What are the characteristics of a good boot for ordinary wear with the foot in a condition of health?" Dr. Lovett thus summarizes the answer in vol. 2, page 662, of Roswell Park's Surgery:—

"The essentials of a good boot are as follows: The inside line should be straight or nearly straight. The boot should be built to hold the foot in an adducted position; that is to say, the forward part should be at an angle to the hind part if their axes are shown by lines drawn in the middle of the sole and middle of the heel. There should be plenty of width across the metatarso-phalangeal joints in order that the weight may be properly borne upon the ends of the metatarsals, and the sole of the boot should be as wide as the sole of the foot. The shank should be broad, not cut away at its inner aspect; it should be fairly stiff."

To this I would add: The sole should be flat, not convex, from side to side, and only slightly turned up at the toes. The heel should be low, flat and large, not only broad but long, for a stiff

shank will be of little service unless sufficiently supported by a good heel below. A small heel soon becomes rounded at the edges and allows the foot to roll, twisting and weakening the shank of the boot and rendering the foot liable to strain.

Although boots with the front part strongly adducted in relation to the back part, and with a straight inner border, are beyond doubt theoretically correct, in practice I have not found them as easily employed as I anticipated. A couple of years ago I had a set of lasts manufactured after the model of the one shown in Fig. 6. The model was based on plaster casts of the least distorted feet I could find. Whatever other defects this last may have it at least fulfils the requirements of a straight inner border and adducted fore part. But it is only very exceptionally that I can recommend my adult patients to have boots made from this last, unless I intend to have a toe-post built into the boot, to keep the displaced great toe in proper position. The feet of practically all adults in civilized life have the great toe deflected outward, and if the boot is made with its inner border straight the result is an unoccupied space to the

Fig. 6.

inner side of the great toe, unless some device such as the toe-post is employed. Also, the greatly adducted forepart of the boot has, in my experience, been apt to cause uncomfortable pressure upon the smaller toes, cramping them under the foot and causing corns; but this is doubtless due more to deformity of the foot than to the shape of the boot, as the normal adduction of the foot at the medio-tarsal joint, as seen in the infant, is apt to have largely disappeared, or even to have given place to abduction by the time adult life is reached. If, however, a form of boot meeting the requirements summarized by Dr. Lovett were worn continuously from infancy, I fancy that perfectly normal feet in the adult would cease to be such a rarity as at present. It should be said, however, that it is useless to construct a boot of proper shape unless some attention is at the same time bestowed upon the stockings. These are nearly all made with pointed toes, and constitute a mechanical force sufficiently powerful, acting as it does every day in the year, to deform the foot even without the assistance of badly shaped boots. Socks and stockings should always be made with a separate compartment for the great toe.

I wish to add a word as to the manufacture of the special forms of boots to which reference has been made in this paper. The experience of Dr. B. E. McKenzie and myself has been that the only sure way of having our wishes executed is to train our own mechanics and have the work done in our own shops. Even then it is necessary to keep a watchful supervision of the work to prevent slight departures from original models, and to guard against the introduction of unauthorized "improvements" by the workmen. To send a patient to the shoemaker with instructions to get a particular kind of boot is to court certain disappointment. The patient will almost surely suggest slight modifications with a view of improving the appearance, etc., and these wishes are obligingly met as far as possible; and if the patient is pleased with the result the shoemaker will gradually introduce more and more of his own conception of what is required, until in a few months he is turning out boots which bear little resemblance to the original pattern. We have found that even in making repairs an untrained mechanic will almost without exception show that he has little or no conception of the mechanical requirements of the special boots here described; and after the repair is completed the surgeon may congratulate himself if the restored boot is even a near approach to the original. If the surgeon desires to get the best results obtainable from the use of modified boots in the management of orthopedic conditions, it is absolutely necessary that he should to some extent personally supervise the work of the mechanics who make them.

12 East Bloor St., Toronto.

Drs. J. A. Temple, Allen Baines and W. Wilson attended the annual meeting of the American Pediatric Association, in Cincinnati, last month.

Dr. H. Morell (Trinity, '92), now practising at Slayton, Minn., has been appointed Examiner in Anatomy to the State of Minnesota. The doctor has just published a book entitled "Records of Urinary Examinations," a review of which will appear in our next issue.

Through a typographical error, we regret that the word "proctitis" was used instead of "prostatitis," in Dr. Manley's article on "The Bearing of Pathological Processes on the Therapy of Morbid Processes along the Genito-Urinary Tract in the Male," appearing in the June issue.

Dr. Wm. Osler, professor of medicine at the Johns Hopkins University, and physician in charge of the Johns Hopkins Hospital, is one of the fifteen scientists selected this year by the committee of the Royal Society to be recommended for membership in the Royal Society of England. The Society embraces the most distinguished scientists of the world.

Public Health and Hygiene.

. . . IN CHARGE OF . . .

J. J. CASSIDY, M.D., AND E. H. ADAMS, M.D.

THE CANADIAN NORTH-WEST AND ROCKY MOUNTAIN DISTRICTS IN THE TREATMENT OF TUBERCULOSIS.*

BY P. H. BRYCE, M.A., M.D.,
Deputy Registrar-General.

SINCE it would be impossible in the few minutes for a paper to set forth in detail the several conditions of the climate in the many districts extending from Rat Portage to Vancouver, I shall endeavor to indicate briefly some of the influences especially affecting the tuberculized, resident in such climates.

Perhaps nothing has during the last fifteen years grown into such favor in the treatment of tuberculosis as the so-called air-cure. Naturally warm climates, owing to the ability of the invalid to be much in the open air, seemed most suited for such treatment, and so Florida, the Bermudas and the West Indies became noted as winter health resorts. Later, however, the salubrious inland valleys of California—hemmed in by the spurs of the Sierras of the Coast Range, with a climate so modified by the Japanese Current that roses bloom in the winter—have grown into greater favor, since with the warmth the quality of dryness has been added.

Still later, as the railways gave access to the high levels of the Rockies, it has been found that to a still greater dryness, owing to the expansion of the atmosphere with decreased pressure, were added certain effects due to height above the sea level, experienced by all, although the physiological causes therefor were for years not understood. What were apparent was, greatly increased translucency of the atmosphere, excessive evaporation both from lungs and skin, and extreme variations between day and night temperatures, with an almost constant and often great atmospheric disturbance with high winds.

Though such marked characteristics distinguished these mountain climates, they nevertheless, owing to the small amount of rainfall, the constantly dry soil, the great warmth of the sun at mid-day and the brilliancy of the atmosphere, have constantly grown in favor, because of the outdoor life possible and the encouragement given to exercise. The lassitude and enervation due to

* Read before the Ontario Medical Association, June, 1898.

warm, moist climates were replaced here by a stimulation of the physical and mental energies, while a momentum was given to the reconstruction of tissues not at all equalled in the dry and beautiful climate of southern California.

The cause of this influence of high altitudes has within very recent years been apparently well determined by the experiments of Paul Bert, Regnard, Viault, and others. They have found that, in fact, the amount of oxygen demanded by the physiological requirements of the tissues cannot at first be obtained by the red corpuscles of the blood in the lungs from the atmosphere at an altitude of, say, 5,000 feet, due to their lessened ability to hold oxygen under reduced pressure. The primary effect of this deficiency is the feeling of shortness of breath, which in excess is accompanied with various sensations summed up by the phrase *mal de montagne*. Thus the respirations are notably increased, the pulse quickened, the nervous system excited, while sleeplessness for several days is present. Nature, however, soon comes to the rescue, and within ten days or a fortnight has increased the red blood corpuscles to the extent that they are equal to the needs of the system in supplying oxygen by what is termed hæmatocytosis. Such a hæmatocytosis becomes a true hæmatopoiesis, and shows itself in a marked and rapid increase of the general nutrition, a lessening of the tuberculous processes, a diminution of the cough and fever, an increase in weight, and general progression toward health.

While these special influences have been studied, especially in connection with what Regnard calls "*la cure d'altitude*," the conditions can by no means be wholly ascribed to the one factor—altitude. To anyone familiar with the climatic qualities of the Great West of Canada, it will seem plain that in the prairie region rising from the lands of Manitoba westward until Banff is reached, at a height of 5,500 feet, every degree of height may be had which may be found most suitable to any particular case of tuberculosis, while in the 500 miles—extending through the sea of mountains, made up of the three ranges with the intervening plateaus between, from Banff to Vancouver—there is infinite variety of heights and local conditions to tempt the most fastidious searcher after health.

I have indicated that the one element of height cannot be said to be the only, though a very important, factor in the work of general nutrition and reconstruction of tissue. Regnard very properly points out the marvellous purity of the air at elevated heights, as regards its freedom from microbes. This has been fully demonstrated in Pasteur's earlier experiments on the question of spontaneous generation. This, however, can be found in almost equally great degree in the great prairies and country of the foothills about McLeod, Calgary and Edmonton. Besides this, however, the transparency of the atmosphere, the brilliancy of the sunlight and the large number of days of sunshine play a part certainly as great as in the famed resorts of the dry tablelands of Algeria

and Oran; while the general presence of vegetation and of a cold air supply a stimulus to the circulation, to the appetite and to nutrition, which must certainly result in a rapid and notable hæmatopoiesis. The effects of sunlight, not only upon the destruction of microbes, but also in direct hæmatinic effects, will, it is hoped, be soon proved by exact experiment to be as great upon the animal as it has been shown to be in the metabolism of plant life. The influence of cold in maintaining vigor during the period when the ground is wrapped in its snow mantle is so well known to every Canadian as to hardly require a reference. Not only is the relative humidity low, but the cold causes an increase in air density, and therefore of the amount of oxygen in the amount of air taken in with every respiration. That this is very notable may be understood, since the capacity of air for moisture is doubled with every 23° F. of increase in temperature, owing simply to the expansion. That the reconstruction of the tissues depends notably upon this is seen not only in the increased demands of the system for food and its ability to assimilate large amounts of meat-producing foods in winter, but also from the statements and statistics regarding increase of weight, and the notable improvement in the health of consumptives given by Trudeau after twelve years' experience at the Saranac Lake Sanatorium at 2,000 feet of height in the Adirondacks, as well as by observers at high level stations in the Alps, as at Davos and in the "Hautes Pyrenees."

Assuming, however, that height varying according to the individual physical conditions of a patient, since those with weak hearts and notably neurotic symptoms cannot with impunity be taken at once to the high level climates, it is evident that from Maple Creek, at 2,200 feet, in Alberta, we have stations with a graduated ascent to Calgary at 4,500 feet, Banff at 5,500, and, by easy ascents, 6,000 feet near Laggan, up to 8,000 on the summits that may be reached. To many in Ontario and Quebec it will be a surprise to learn that the climate of Banff is more equable and less severe than many parts of Quebec and Ontario, while the influence of the Chinook winds causes an earlier and more pleasant spring than is experienced in the region of the Great Lakes. Westward toward the coast this Chinook influence becomes still more marked, and as we enter the plateau between the Selkirks and the Coast Range lying south of Kamloops to the 49th parallel through the Okanagan valleys, we find an ideal climate so far as the several elements affecting the tuberculous process are concerned. Thus, curious as it may seem to us in Toronto under the 43rd parallel, there lies under the 51st parallel a country where there are not more on an average than seventy-five days in the year on which rain falls, with a climate having an annual mean temperature 1° higher than that for Toronto. With a high mid-day temperature during July and August, succeeded by cool nights, we have an autumn with a mean monthly temperature higher to the end of December, it being 4° warmer in that month than Toronto. With January and

February come two months of clear, cold weather, with little snow. As March arrives, spring weather approaches rapidly, giving for this month 7° higher of an average temperature at Kamloops than Toronto. Thus this climate of relatively remarkable equability is due to the warm winds blowing constantly landward from the Japanese Current and becoming dry over these valleys, having been robbed of the moisture by the mountains of the Coast Range. The general altitude of these valleys is from 1,000 to 1,500 feet, whence, however, the equestrian can within an hour or two reach heights on the branches and foothills of the ranges of 3,000 to 4,000 feet, as may be found desirable or good for an invalid.

It thus becomes apparent that altitudes most favorable for hæmatocytosis can be reached, or a return to the lower levels made, as may prove in experience most suitable. Owing to the dryness, there being not more than ten or fifteen inches of annual rainfall, the climate has almost perennial sunshine, and exercise out of doors is almost always possible. Add to this the present sparseness of population and the absence of all polluting agencies of the atmosphere, and we have united in a most remarkable manner those elements which experience has found favorable to nutrition and for curing and holding in check the tuberculous process.

As yet the country is hardly known, even to Canadians, as a health resort, owing to its distance from the Eastern Provinces, and still more to its newness and the few facilities for the accommodation of travellers and invalids. What, then, is first required is the knowledge spread amongst the medical profession of the remarkable climate of that region, and along therewith the establishment of sanatoria under precise medical regulation. While nothing can be more melancholy than to see a patient sent by the order of his medical adviser to a new country, where he must endure poor accommodation in a small hotel or boarding-house and amongst strangers, with no medical adviser to tell him how to regulate his daily life, yet nothing is more pleasing than to see a series of single cottages grouped together as a sanatorium, where a number of the tuberculized, living their simple lives, may enjoy to the full the life-giving influences of a climate where, with days spent wholly in the open air, by promoting nutrition and by encouraging through gentle exercise the metabolism of tissues, sleep is improved, the nervous cough and expectoration are gradually lessened, and the feeling that the place is home is generated with a love for the country and climate which are bringing him life and hope.

Owing to the character of the climate and the productiveness of the soil under irrigation, the country must shortly become the home of thousands, who will be occupied in fruit-growing and in cattle-raising on the bench lands of the foothills. Possessed of so fortunate a gift from Nature, Canadians will do well to make provision whereby the health-giving qualities be not injured in their good repute, as has occurred notably in California by the absence

of regulating the tuberculized who go there and have caused many instances of house infection amongst the resident population. But more than this, the experience of every physician who has visited in the South or West the numerous winter resorts has taught us that very little permanent good is to be accomplished by sending patients to such districts, except to sanatoria where their daily routine of life is guided and regulated by the wise but firm hand of the trained physician.

The Poultice in Pneumonia.

Dr. A. W. Schin, in the *Lancet*, gives several very strong reasons why the poultice should not be used in bronchopneumonia of children. The weight of the poultice, and the change of temperature between the application and removal, tend to heart failure, and are, like the repeated removal of a patient from a hot to a cold room, unscientific and prejudicial to the welfare of the patient. He obtains better results by applying to the chest a packet, loosely fitting, made of light material, and rubbing it with oil and turpentine, giving at the same time the remedy indicated by the stage of the disease.—*Medical Age.*

Professor Ricord.

A good story is told of this celebrated surgeon. In a little town near Orleans there lived, more than fifty years ago, a celebrated bone-setter, who cured all the ills of humanity, and who enjoyed a great reputation in that country; no doctor had ever attempted to supplant him. One day, however, a young doctor, fresh from the learned faculty, arrived in the town and installed himself close by the bone-setter. It was not long before our *confrère* found out that his diplomas were of little use in competition with his rival. One day he was called to see the blacksmith, who was very ill, and after a proper examination he prescribed for him according to the rules of his art, and said that he would return the following day. That same evening, however, the bone-setter stepped in and told the patient that if he took what had been ordered for him he would be dead before the moon set a second time. Needless to say, the bottles were thrown out, and the charms of the medicine man substituted. The blacksmith got well. Exposed to constant affronts and a thousand and one annoyances, our unfortunate doctor determined to abandon the struggle, and returned to Paris with only five shillings in his pocket. He died a few years ago, leaving a colossal fortune, a brilliant renown, and a celebrated name, and a statue has been erected to him opposite the hospital where he worked the greater part of his life in the interest of humanity and science. His name was (?) Ricord.—*Medical Age.*

REPORT OF DEATHS FROM CONTAGIOUS DISEASES IN ONTARIO FOR THE MONTHS OF APRIL AND MAY, 1898.

PREPARED BY P. H. BRYCE, M.A., M.D., DEPUTY REGISTRAR-GENERAL.

APRIL, 1898.

Total Population Reporting.	Total Municipalities Reporting.	Total Deaths Reported.	Scarlatina.	Rate per 1,000 per Annum.	Diphtheria.	Rate per 1,000 per Annum.	Measles.	Rate per 1,000 per Annum.	Whooping Cough.	Rate per 1,000 per Annum.	Typhoid.	Rate per 1,000 per Annum.	Tuberculosis.	Rate per 1,000 per Annum.
1,465,703 64%	522 68%	219	14	0.1	12	0.1	7	0.05	4	0.03	9	0.07	173	1.4

MAY, 1898.

1,684,509 75%	604 81%	238	17	0.1	16	0.1	15	0.1	9	0.06	13	0.09	168	1.2

Population of Province 2,263,492

Municipalities of Province..... 745

Proceedings of Societies.

ONTARIO MEDICAL ASSOCIATION.

THE eighteenth annual meeting of the Ontario Medical Association was held in Toronto, June 1st and 2nd—Dr. William Britton, Toronto, presiding. Dr. E. L. Shirley, President of the Michigan State Medical Society, was introduced and given a seat on the platform.

Dr. A. McPhedran presented the report of the Committee on Papers and Business and moved its adoption. Carried. The reception of the report of the Committee of Arrangements was postponed.

Dr. Greig, Toronto, read a paper on "Infant Diet."

Dr. George Peters, of Toronto, opened the discussion in Surgery. Subject, "Treatment of Fractures of the Skull." This was discussed by Drs. Bingham, T. T. S. Harrison, T. K. Holmes, and I. H. Cameron. Dr. Peters closed the discussion.

Dr. Samson, of Windsor, read a paper on "Conclusions Culled from Thirty Years' Experience."

WEDNESDAY AFTERNOON.

The President read a communication from Dr. Rogers, chairman of the Committee of Foreign Invitations of the American Medical Association, extending an invitation to the members of the Ontario Association to be present at the Denver meeting. On motion of Dr. Harrison, seconded by Dr. McPhedran, a vote of thanks was tendered to the American Association for their kind invitation. The secretary read the minutes of the morning session.

Dr. Ryerson read the report of the Committee of Arrangements, which was adopted.

Dr. Bruce Smith presented the first interim report of the Committee on Credentials, which was adopted.

Dr. Britton then delivered the presidential address. He was tendered a hearty vote of thanks on motion of Dr. John Coventry, seconded by Dr. Harrison.

Dr. W. J. Wilson moved that the regular order of business be suspended, as he had a resolution to bring before the meeting. Carried.

Dr. Wilson moved "That, in the opinion of this Association, no one should receive free treatment as an out-door patient in our public hospitals, except those receiving their hospital maintenance from the municipality to which they belong."

Dr. Samson moved in amendment that a committee consisting

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ONTARIO MEDICAL ASSOCIATION, 1898.

Interior of R. C. Y. C.—Annual Luncheon, June 2nd.

ONTARIO MEDICAL ASSOCIATION, 1898.

Snap shots taken on board *The Oriole*, afternoon of June 2nd,

of Drs. Coventry, John Wishart, T. K. Holmes, Bruce Smith, A. H. Wright, J. C. Mitchell, W. J. Wilson and C. O'Reilly be appointed to consider the various recommendations made in the president's address. On motion of Dr. Ross, seconded by Dr. Powell, Dr. Wilson's resolution was tabled.

Dr. A. T. Hobbs, of London, read a paper on "Some Present Methods of Treatment of Patients at London Asylum for the Insane." This was discussed by Drs. J. Russel, Bruce Smith and J. F. W. Ross. The Association then divided into sections.

Medical Section.

Dr. J. C. Mitchell was appointed chairman in this Section, Dr. Brown acting as secretary.

Dr. R. Ferguson, of London, read a paper on the "Injurious Effects of our Over-wrought School System on the Health of Public and High School Pupils." Dr. Ferguson, at the end of his paper, introduced the following resolution:

"That this Section of the Ontario Medical Association expresses its conviction that the school pupils of this Province are overworked, that the examination system is overdone, and that the strain and cramming due to excessive study is injurious to the mental and physical constitution of the pupils.

"That this Section recommends that the number of school studies be lessened, and that the curriculum be framed with a due regard for the mental capacity and the preservation of the health of the school children."

This was discussed by Drs. Sheard, Spence and Britton. Dr. Ferguson closed the discussion. The chairman suggested that those who had spoken on the subject constitute a committee to consider the resolution and report before the general session of the Association.

Dr. J. C. O. Hastings read a paper on "Toxæmia of Pregnancy."

A paper on "Vicarious Urination" was presented by Dr. A. T. Rice, of Woodstock. This was discussed by Drs. Adami, Hastings, McLurg, Cruickshanks, McCallum (London), Fenton, Chambers, Dr. Rice closing the discussion.

Dr. C. B. Oliver's paper on "Traumatism of Labor" was taken as read.

Dr. Walter McKeown read a paper on "The Application of the Principle of Osmosis to the Treatment of Toxæmia."

Dr. Olmstead's paper was postponed.

Surgical Section.

Dr. Angus McKinnon was appointed chairman of the Section and Dr. Herbert A. Bruce, secretary.

Dr. A. Primrose presented a paper on "Operative Methods in the Conservative Treatment of Tubercular Joints." This was discussed by Drs. Coventry, A. Davidson, H. P. Galloway and C. L. Starr. Dr. Primrose replied.

Dr. Holmes was appointed chairman, while Dr. McKinnon read his paper on "Supra-Pubic Prostatectomy." This was discussed by Drs. A. B. Wolford, Greig, Forfar, H. H. Oldwright, Holmes and Peters. Dr. McKinnon replied.

The Section then adjourned.

EVENING SESSION.

Dr. McPhedran presented his paper on "Cretinism in Ontario," illustrated with lantern slides.

Dr. H. A. McCallum opened the discussion in "Medicine on Immunity in Excretion and Cure." This was discussed by Dr. Anderson.

Dr. J. C. Adami, of Montreal, read a paper on "Syphilitic Cirrhosis."

THURSDAY MORNING.

The president ruled that papers read be handed into the secretary to be disposed of by the Committee on Publication.

Dr. Holmes, of Chatham, opened the discussion in "Gynæcology." Subject, "Carcinoma of the Uterus." This was discussed by Drs. Rowe, Georgetown; and A. A. MacDonald, of Toronto.

Dr. A. H. Wright presented a paper on "The Management of Difficult Breech Labors." The essayist demonstrated his methods by the use of a manikin. Drs. C. J. Hastings, W. Oldwright, Bray and Rice discussed the paper.

Dr. J. H. Richardson was invited to the platform and briefly addressed the Association.

A communication was read from Dr. A. M. Rosebrugh, secretary of the Prisoners' Aid Society, regarding the establishment of a home for inebriates. The President said that he would, with the consent of the Association, appoint a committee whom he would ask to consider the matter and report at the next annual meeting. This was approved of by the meeting. The President referred the matter to the Committee on Public Health.

Dr. McKinnon begged the privilege of introducing a motion—"That the dinner of the Association take place on the first evening of the Association, and that the out-of-town members pay their own way." Seconded by Dr. Rowe. Carried.

The Association then divided into sections.

MEDICAL SECTION.

Dr. A. T. Rice, of Woodstock, was appointed chairman of this Section.

Dr. R. Doan, of Harrietsville, read a paper on "My Experience with Antitoxin in the Fall of 1897." This was discussed by Drs. E. L. Shirley, C. Sheard, Price, Brown, Adami, L. M. Johnston, McPhedran and Samson. Dr. Doan closed the discussion.

Dr. Heggie then read a paper on "Hyperresonance of the Chest a Premonitory Symptom of Pulmonary Tuberculosis."

Dr. P. H. Bryce read a paper on "The Effect of the Climate of our Canadian North-West on Patients with Tuberculosis."

The Section then adjourned.

Surgical Section.

Dr. N. A. Powell read a paper on "Catgut, Gauze and Sponges—What are the best methods of their preparation?"

Dr. Oldright, sen., read a paper on "When Should We Operate, illustrated with cases." This was discussed by Drs. McKinnon, Riddell, McKenzie, C. Starr and Holmes.

Dr. G. H. Burnham read a paper on "The Various Operative Methods of Dealing with Eyes Lost through Injury or Disease." This was discussed by Dr. Chas. Trow.

The Section then adjourned.

The luncheon was then eaten at the Royal Canadian Yacht Clubhouse. A clinic followed at the Victoria Hospital for Sick Children. Dr. W. B. Thistle showed two cases of rheumatoid arthritis.

Dr. G. Peters showed (1) a case of teratomatous tumors on the back of a child, each containing intestine; (2) a case of ectopia vesicæ with prolapse of the rectum; (3) a case of empyema.

Dr. Primrose showed (1) a case of psoas abscess in which he had operated without drainage; (2) a case of deformity due to birth palsy; (3) a case of arthrectomy for tuberculosis of the knee-joint; (4) a case of Calot's operation for forcible reduction of spinal deformity.

Dr. Crawford Scadding made some remarks on the administration of chloroform in the prone position. He showed a case of rickets.

Dr. Powell showed a case in which he had fractured both lower limbs by manual force, followed by plaster-paris splintage for correction of deformity.

The hot air bath, as used in the treatment of surgical and medical diseases, was shown and its operation demonstrated.

EVENING SESSION.

Dr. Britton presided. The minutes of the preceding session were read and adopted.

Dr. McPhedran presented the report of the Committee on Nominations. It was as follows: Next place of meeting, Toronto. President, W. J. Gibson, Belleville; First Vice-President, J. F. W. Ross, Toronto; Second Vice-President, I. Olmstead, Hamilton; Third Vice-President, W. J. Rowe, Georgetown; Fourth Vice-President, N. McCrimmon, Kincardine; General Secretary, John N. E. Brown; Assistant Secretary, E. Hurlbert Stafford, Toronto; Treasurer, Geo. Carveth, Toronto. And to the Committee on Creden-

tials were added: W. J. Wilson and W. J. Greig, Toronto; to the Committee on Public Health, J. Hutchinson, London, and Gilbert Gordon, Toronto; to the Committee on Legislation, J. C. Mitchell, Enniskillen and John Samson, Windsor; to the Committee on Publication, J. T. Fotheringham, Toronto, and V. Anklin, Kingston; to the Committee on By-laws, J. Wishart, London, and A. McKay, Ingersoll; to the Committee on Ethics, A. McKinnon, Guelph, and G. Hodge, London; to the Advisory Committee, Wm. Britton, Toronto.

The report was adopted. Dr. Samson was then appointed to the chair.

Dr. W. Britton presented the report of the committee appointed to consider the resolution appended to the paper of Dr. Ferguson. It was as follows:

"The committee appointed yesterday by the Medical Section to prepare a resolution for submission to the Association on the subject of over-study in the public and high schools of Ontario and other matters pertaining thereto, beg leave to recommend the adoption of the following resolution:

"Inasmuch as the promotion and maintenance of the public health constitutes one of the most important objects for which the Ontario Medical Association was organized, it is submitted that, while fully recognizing the high standard of general education attained under our provincial school system, it is the opinion of this Association:

1. That the school children are over-worked to the detriment of their mental and physical health.

2. That in many schools the ventilation and air space per pupil are not ample to fulfil the proper sanitary requirement.

3. That the lighting of the school rooms is often so inadequate or so badly arranged as to induce various forms of visual defects.

4. That while some provision has been made for physical exercise there is room for improvement in this respect.

5. That home studies are as a rule made too arduous to allow for such rest and recreation as are essential to physical growth and development.

It is therefore recommended:

1. That the number of subjects of study prescribed by the Education Department be lessened.

2. That homework be curtailed.

3. That less exacting examinations be imposed on the pupils.

4. That more time during school hours be devoted to physical culture.

5. That school trustees should confer with members of the medical profession as to lighting, ventilation and capacity of school rooms.

6. And that the curriculum generally be framed with full consideration of the paramount necessity for preserving the physical health of the rising generation.

Dr. Britton moved the adoption of the report.

Dr. Peter Bryce seconded the motion. It carried unanimously.

Dr. Ross, Minister of Education, who was present, was then called upon. He expressed his pleasure at the recommendations made by the Association, and invited the president to appoint a committee to confer with him regarding the points touched upon in the report.

All of which is respectfully submitted."

The resolution was signed by Drs. Britton, Sheard and Ferguson.

The president named the following gentlemen as members of the committee to confer with the Minister of Education: Drs. R. A. Reeve, A. A. MacDonald, D. G. Wishart, E. J. Barrick, A. McPhedran, J. T. Fotheringham, R. Ferguson, A. McKinnon, C. Sheard, J. Spence, Rowe, G. Gordon, Hutchinson, H. Griffin, P. H. Bryce, G. S. Ryerson, and L. L. Palmer.

The treasurer presented his report, which was adopted.

It was moved by Dr. Britton, seconded by W. J. Wilson and *Resolved*,—"That this Association deplores the fact that in the various hospitals and dispensaries of the Province, under the guise of poverty many designing persons who are quite able to pay a medical practitioner at least a moderate sum for his services make false representations as to their financial standing, thereby securing gratuitous care and professional advice or attendance, inflicting a grievous evil upon the profession at large, imposing upon the time and skill of those who attend them and obtaining the charitable consideration which is designed exclusively for the deserving poor; therefore it is further resolved that a Representative Committee be appointed, consisting of five members from the staffs of as many hospitals, and five chosen from the outside profession, with power to add to their number, in the same proportion, whose duty it will be to make full enquiry during the coming year as to the extent of the evil, and to report to this Association at its next annual meeting their conclusions as to the best means for its suppression."

The resolution was discussed by Drs. Ryerson, Bryce and Fotheringham. Carried.

It was moved by Dr. F. N. G. Starr and seconded by Dr. T. S. Harrison, "That this Association desires to express its willingness to approve of some scheme whereby reciprocity between the Provinces may become an accomplished fact, without degradation of the Ontario standard, and that its members in meeting assembled do request that the Ontario Medical Council act in conjunction with the councils of the other Provinces with a view to bringing about this happy result."

This was discussed by Drs. Powell, Britton, Ryerson, Cruikshanks and Barrick, and carried.

It was moved by Dr. Barrick and seconded by Dr. W. J. Wilson, "That it be an instruction to the Committee on Papers and Business

to take up the report of the Legislative Special Committees, and resolutions of which notice has been given, immediately after the president's address at the next meeting of the Association."

This motion was discussed by the mover, the seconder, J. F. W. Ross, H. T. Machell and Bryce. Lost.

Dr. Barrick then gave the following notice of motion:

"That whereas there is reason to believe there is a widespread feeling among the medical men of this Province that the system now in vogue of lodge and contract practice is undignified and derogatory to the best interests of the profession, and should be abolished;

"Be it therefore resolved that in the opinion of this Association the Medical Council be and is hereby memorialized to take a plebiscite on the question of prohibition of lodge and contract practice.

"And further, in case the prohibition be endorsed by a substantial majority, to immediately, or as soon thereafter as possible, apply to the Local Legislature to have such amendments made to the Medical Act as to put the above in force."

The usual honoraria were then voted to the secretaries.

A letter was read from Dr. C. R. Dickson, president of the American Electro-Therapeutical Association, inviting the members of the Ontorio Medical Association to attend the annual meeting to be held in Buffalo in September.

On motion of Dr. E. H. Adams, all papers unread were taken as read.

Dr. Bruce Smith presented the following report of the Committee on Necrology:

"Your Committee on Necrology beg to report the names of the following members of this Association who have gone over to the majority during the past year: Drs. Burns, Strange, Burgess and Closson, of Toronto; Drs. Miller and Shaw, of Hamilton; Dr. Cronyn, of Buffalo; Dr. Dixie, of Springfield; Dr. Newcombe, of Sandwich; Dr. McClure, of Thorold; Dr. Griffin, of Brantford; Dr. Killock, of Perth; Dr. Hill, of Ottawa, and Dr. Cunningham, of Kingston."

The report was adopted.

Dr. Primrose presented the report of the Committee on Publication as follows:

"The Committee on Publication beg to report that in consequence of the fact that during the past few sessions of the Association members have been permitted to part with their papers otherwise than through the Committee on Publication, the members of the Association have not handed their papers to the secretary. The president ruled this morning that all papers should be disposed of through the committee and that they should be distributed to the various journals. This ruling was, however, too late to affect matters this session and in consequence the committee have no papers referred to them."

Dr. N. A. Powell presented the report of the Committee on Ethics. It was as follows:

"Your committee beg to report that during the year no formal complaints have been sent in calling for action at our hands.

"We recommend that, as the supply of copies of the 'Code of Ethics' adopted by this Association is now exhausted, a new issue be arranged for. The code having received a thorough revision when last before the Association it is inexpedient to make further changes in it at the present time."

It was moved by Dr. Samson and seconded by Dr. Harrison, "That the sum of $75 be donated to the Ontario Medical Library Association in recognition of its usefulness to the profession throughout the Province generally, if the funds of the Association will warrant it." Carried.

The following votes of thanks were then passed:

It was moved by Dr. Gibson, seconded by Dr. C. R. Dickson, "That the thanks of this Association be tendered to the Royal Canadian Yacht Club for the use of their clubhouse in entertaining the members of the Association."

It was moved by Dr. Dickson and seconded by Dr. Clouse, "That the secretary be instructed to send to the Toronto Street Railway Company the thanks of the Association for their kindness in supplying cars for the excursion about the city." Carried.

A hearty vote of thanks was tendered to the Honorable the Minister of Education for the courtesy manifested in placing once more the handsome rooms of the Education Department at the services of the Association.

The meeting then adjourned until the first Wednesday and Thursday of June, 1899.

FORTY-NINTH ANNUAL MEETING OF THE AMERICAN MEDICAL ASSOCIATION.

DENVER has redeemed her pledges, and the meeting of this Association just closed has been one of the most satisfactory in its history. The very atmosphere of Colorado seemed to be imbued with hospitality. The attendance exceeded all expectations, the registration reaching 1,600. In the absence of President Sternberg, the chair was gracefully filled by First Vice-President Joseph M. Mathews, of Kentucky.

The entertainments provided by the local committee were not only elaborate, but pleasing in the extreme, and the memories of Denver's beauty spots will ever remain in the minds of the visiting physicians.

The following officers were selected for the ensuing year:—

President—Joseph McDowell Mathews, of Louisville, Ky.

First Vice-President—W. W. Keen, of Philadelphia, Pa.

Second Vice-President—J. W. Graham, of Denver, Col.
Third Vice-President—H. A. West, of Galveston, Texas.
Fourth Vice-President—J. E. Minney, of Topeka, Kansas.
Secretary—William B. Atkison, of Philadelphia, Pa.
Treasurer—Henry P. Newman, of Chicago, Ill.
Members of the Board of Trustees—Alonzo Gracelon, of Maine; I. N. Love, of St. Louis, Mo.; H. L. E. Johnson, of Washington, D.C.
The next place of meeting is Columbus, Ohio.

CANADIAN MEDICAL ASSOCIATION.

THERE is no man so deserving of a holiday as the hard-working physician who has had his nose to the grindstone from early morning till late at night. It is not only a privilege but a duty to relax one's energies at least once a year and take an outing. Having made up one's mind to go away for a bit, the next question is where to go, for one likes to gain some mental profit as well as physical vigor. This year the Canadian Medical Association offers peculiar inducements to the busy man by meeting in the historic old city of Quebec on August 17th, 18th and 19th next. This will give to the physicians of the Dominion an opportunity to visit at a trifling cost one of the most picturesque parts of Canada, with profit to himself and benefit to his patients. It, too, will enable the English and the French to become better acquainted, thus helping to bring about a better understanding of each other.

The president, Dr. J. M. Beausoliel, is putting forth every effort to make the meeting a success. The Local Committee of Arrangements, under the chairmanship of the vice-president, Dr. Parker, ably assisted by the local secretary, Dr. Marois, are doing good work toward making the visit of their medical brethren enjoyable. It has been whispered that a trip to Grosse Isle is probable as a part of the entertainment. The officers of the Association are confidently looking forward to a large and enthusiastic gathering.

For particulars, address

Toronto. F. N. G. STARR, *General Secretary.*

DR. THEODORE COLEMAN (Toronto, '94) has returned from England and will practise probably in Toronto.

DR. DON. ARMOUR (Toronto, '94) will remain in England. He has received an appointment on the staff of University College, London.

DR. FRANK P. FOSTER, editor of *The New York Medical Journal,* paid a visit to Toronto to attend the meeting of the Ontario Medical Association.

DR. HARRISON, of Selkirk, sailed for England recently to attend the meeting of the British Medical Association as the representative of the Ontario Medical Association.

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
EDITOR,
69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.Lond.,
BUSINESS MANAGER,
145 COLLEGE STREET, TORONTO.

Surgery—BRUCE L. RIORDAN, M.D.,C.M., McGill University; M.D. University of Toronto; Surgeon Toronto General Hospital; Surgeon Grand Trunk R.R.; Consulting Surgeon Toronto Home for Incurables; Pension Examiner United States Government, and F. N. G. STARR, M.B., Toronto, Lecturer and Demonstrator in Anatomy, Toronto University; Surgeon to the Out-Door Department Toronto General Hospital and Hospital for Sick Children.

Orthopedic Surgery—B. E. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

Oral Surgery—E. H. Adams, M.D., D.D.S., Toronto.

Surgical Pathology—T. H. MANLEY, M.D., New York, Professor of Surgery, New York School of Clinical Medicine, New York, etc., etc.

Medicine—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and W. J. WILSON, M.D., Toronto, Physician Toronto Western Hospital.

Gynæcology and Obstetrics—GEO. T. MCKEOUGH, M.D., M.R.C.S. Eng., Chatham, Ont.; and J. H. LOWE, M.D., Toronto.

Medical Jurisprudence—W. A. YOUNG, M.D., L.R.C.P. Lond.,Eng., Toronto.

Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician, Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTON, M.D., M.R.C.S.Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology, Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P.Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THORBURN, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otology—J. M. MACCALLUM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

Address all Communications, Correspondence, Books, Matter Regarding Advertising, and make all Cheques, Drafts and Post-office Orders payable to "The Canadian Journal of Medicine and Surgery," 145 College St., Toronto, Canada.

Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. IV. TORONTO, JULY, 1898. NO. 1.

Editorials.

THE DUTY OF PHYSICIANS IN PREVENTING TUBERCULOSIS.

EVER since 1883, when Koch demonstrated that tuberculosis is a bacillary disease, the medical world has accepted this truth, while at the same time clinging a little to the old-time doctrine of hereditary transmission.

Evidence continues to accumulate, showing that heredity contributes a small share, the principal part being played by contagion operating in a suitable soil. The more frequent the exposure to contagion, the more likely is an attack to occur. Owing to the far-reaching effects of modern travel, few places, even the

most remote, can be said to be exempt from this disease. Observation, however, confirms what would seem to be a reasonable view, that the bacilli are more generally and widely diffused in the large centres of population. It is also precisely in these centres, that physicians find a relatively greater number of cases of tuberculosis and statisticians record a relatively larger mortality from this disease.

Thus, in Ontario 11 per cent. of the total annual mortality for 1896 was due to tuberculosis; but, in the combined population of the thirteen cities of this Province, the mortality from tuberculosis for the same year was 13.35 per cent. Similar conclusions have been drawn from the mortality returns of France, Scotland and the United States.

It is quite in keeping with Koch's doctrine of the contagious origin of tuberculosis, that cases of this disease should occur more frequently in cities than in country places, simply because there are more houses and consequently more foci of contagion in cities than in the country. This is a more correct view than to ascribe the relative frequency of consumption in cities to bad air and its infrequency in rural districts to pure air.

From the standpoint of treatment the presence of a considerable number of phthisical cases in a city is regrettable, because patients of this class often derive great benefit from a residence in the pure air of the country. Financial and social considerations, often mere whim, induce tubercular patients to remain in and other tubercular people to crowd into the cities, so that, unless hygiene can disinfect old centres of contagion and secure the proper disposal of fresh tubercular sputa, a large urban mortality from tuberculosis will, probably, be recorded for many years to come.

Efforts are being made to send candidates for consumption and patients also to places renowned for pure air and also to sanitaria, where, in addition, hygienic, dietetic and medicinal forms of treatment are carried out. Whatever advantages are obtained from fresh air, exercise and diet in sanitaria, much stress is not put on medicines, and specific medicines are now seldom used in these institutions. For instance, at Dettweiler's sanitarium expectorants and codeia are given to prevent severe coughing, phenacetin and antifebrin are given in fever; ice over the heart in especially high fever; against night sweats cognac at bedtime or dusk, or washing with alcohol. In case of hæmoptysis, ice, codeia and ergot.

Professor Landouzy, of the Laennec Hospital, Paris, has

recently published in *La Presse Medicale* a splendid article on the prevention of tuberculosis, and in treating this part of the subject, we shall take the liberty of reproducing his views, which, in the main, are now universally accepted. He says, that the hygienic treatment in use at the various European sanitaria, is of the first importance and sometimes works wonders, when begun at an early date and when continued, pertinaciously, for a considerable time.

Unfortunately, however, this hygienic treatment is necessarily very lengthy, so long, indeed, that the general run of tubercular cases cannot derive full benefit from it. It often happens, besides, that cases of acute phthisis occur which defeat the best laid plans of hygienic treatment and carry off the victims in a few months.

Preventive measures are, therefore, in Landouzy's opinion, of much more importance than any method of treating tuberculosis, and wherever a physician may practise—in a city or in the country —while he should strive to do what he can to cure phthisis, he will do more good to his patients and the people of the municipality in which he practises, if he propagates the doctrine that it is more easy to *protect one's self against phthisis than to be cured of it.* To do this in private families, as well as in public institutions, he should speak of the danger of contagion from expectoration and should exemplify what he means, just as surgeons, when inveighing against the evil effects of pyogenic organisms, take care to wash the body of the patient as well as their instruments and their hands, etc., in order to secure a good operative result.

A physician, attending a case of phthisis, should provide for the prevention of contagion and should consider the interests of the other members of the patient's family. If physicians practised prevention in cases of consumption as carefully as they do in cases of small-pox and diphtheria, the proximate and distant results of their efforts would lessen the mortality from consumption more than the best conceived medical treatment.

If people are careless or imprudent in dealing with tubercular cases, it is largely due to the fact that they have not been fully instructed. Such instruction should be given by physicians, who would then be exercising one of the noblest functions of their office, that of guardians of the public health.

Physicians should say frankly, that tuberculosis is contagious; but they should also explain how, when and why contagion takes place. Information should be given the public about phthisis, just in the same way as about scarlatina, typhoid fever or diphtheria.

The physician should explain that it is not the consumptive's body nor his breath, nor his perspiration, nor the air of the room he inhabits which is hurtful: the danger resides in the expectoration. He might also explain that the continuity of this disease, observed in certain families, and which is often spoken of as hereditary, is only a form of a preventable revivification of the bacilli. People understand, that when a patient dies of small-pox, diphtheria or scarlet fever, the disease does not die with him, but may be communicated to others by the emanations or excretions of the dead body. So also, after the departure or death of a consumptive patient, the contagion of his disease remains and survives, since his expectoration, which may have fallen in some corner of the room he occupied, dries up, mixes with the dust and the bacilli, contained in it, are ready for a favorable opportunity and a suitable culture ground to renew the process of tuberculization in some other person. The use of cuspidors should be enforced in the treatment of all cases of phthisis, and further, cuspidors, made of some combustible material, should be provided in all places, private and public, and the people, old and young, should be taught to use them.

Medical opinion taught people the necessity of vaccination and revaccination, in order to prevent the spread of small-pox, long before laws were passed in any country, making it obligatory to vaccinate. Just in the same way medical opinion can teach people that:

Tuberculosis is a preventable disease, since it is transmitted by a controllable contagion;

That the prevention of tuberculosis is particularly a question of family hygiene, a question of hospital hygiene, as much or more than social hygiene.

By saying such things and repeating them broadcast, a physician will do excellent work in preventing and stamping out tuberculosis and will, by so much, help to lighten the arduous task of treating this disease. J. J. C.

HOSPITAL FOR THE INSANE, LONDON, ONTARIO.

"London Asylum," as it is generally called, is beautifully situated on the Old Governor's Road, some three miles east from the City Hall, London. Building operations were commenced in 1869, and the main building was first occupied by patients in the following

year, 1870. There was, in those early days, accommodation for about 500 patients; the number of beds at present occupied is 1,004, making this as large an Institution of its kind as any in the Province.

The St. Mary's branch of the Grand Trunk Railway skirts the property at the suburban village of Pottersburg, and the Canadian Pacific track crosses still nearer to the main building. The eastern terminus of the London Electric Railway is at the asylum gate; and street cars pass to and from the city every twelve minutes during the day. The ornamental grounds immediately surrounding the buildings are considered the finest of the kind in Ontario, and in summer time constitute one of the principal attractions of London.

LONDON ASYLUM: MAIN BUILDING.

The first Medical Superintendent was Dr. Henry Landor, whose death occurred, after a long illness, on 6th January, 1877. For three years previous to the occupation of London Asylum he had been in charge of Malden Asylum; so that at the time of his decease he had gained an experience of nine years in the service. In his official report for the year 1877, Inspector J. W. Langmuir thus wrote respecting the late Dr. Landor:—"Holding advanced views in regard to the treatment of insanity and the administration of asylum affairs, he advocated and enforced these views upon all occasions, to the great benefit of the unfortunate persons committed to his care and the furtherance of effective asylum management. To his attention and energy in utilizing the labor of the inmates

and his skill in farming, gardening and general outdoor operations, the 300 acres of land attached to the asylum, and which at the time of its purchase was almost a barren waste, has now become one of the best farm properties in the Province; yielding a large profit every year and thereby reducing the cost of maintenance. In addition, Dr. Landor at all times was most indefatigable in bringing all branches of the asylum up to its present high state of efficiency."

During Dr. Landor's long illness, and until the appointment of the present eminent incumbent, Dr. Stephen Lett, now of Homewood Retreat, Guelph, was the acting superintendent, and performed the duties of the office with very great satisfaction to all concerned.

Dr. Richard Maurice Bucke was installed as Medical Superintendent on the 15th February, 1877; and for over twenty-one years has guided and governed the affairs of the institution with the wisdom, progressiveness and enthusiasm which have gained for him a continental reputation.

There are now three classes of buildings occupied by patients, which may be conveniently designated as follows: (1) The North Building, which is set apart for the most refractory and troublesome patients, including many epileptics; (2) the three Cottages, where are domiciled quiet, chronic patients of both sexes; and (3), the Main Building, which includes the cases intermediate between these two extremes. Another and most necessary building has been urgently demanded for some time past to further complete the equipment of this large institution, namely, an Infirmary.

Readers of this journal may be surprised to learn that the excellent surgical work which is being done with marked success at London Asylum, and of which something was heard at the recent meetings of the Ontario Medical Association, is necessarily confined to a small suite of rooms in the fourth story of the Main Building, where the patient, to whom perfect rest and quiet are essential, must be more or less disturbed at times by the noises and confusion inseparable from such a location. We are happy to learn that there is now a reasonable prospect of work in the building of the Infirmary being commenced at an early date.

It may be interesting to learn that the water supply of this large institution is derived from a well of excellent spring water, eight feet in diameter and one hundred and twenty feet in depth to its rock bottom, which, under actual test, has been found to have a capacity of 500,000 gallons. It is pumped into iron tanks at the

top of the different buildings, which tanks have a capacity of about 60,000 gallons; and from these the water is distributed by gravitation wherever needed. The water is always good and the supply has never yet failed.

The vexed question of sewage disposal, which in the earlier days of the asylum was a very puzzling one, met a very satisfactory solution when, in 1889, what is called the Intermittent Downward Filtration System was adopted. Of this system a very full explanation, with accompanying plans, will be found in the report of the Provincial Board of Health for 1888. The new system was formally inaugurated on the 5th of July, 1889; and since then the asylum people claim that their sewage field has become "A thing

LONDON ASYLUM: NORTH (OR REFRACTORY) BUILDING.

of beauty and a joy forever." No more nuisances, no more threatened lawsuits; but a pure and wholesome atmosphere, with enormous crops of the finest vegetables and fruits in their season.

The subject of occupation and amusement has received a great amount of consideration from the inception of the institution; and perhaps in no other asylum have the various schemes for employment and entertainment of the inmates been more thoroughly and successfully carried out. Even in the most disturbed wards of the refractory building fully 75% of the patients are engaged in work of some sort, while among the cottagers scarcely an idler may be found. The farm, the sewage field, the gardens, workshops, orna-

mental grounds and wards have each their quota of male workers; while the laundry, sewing room and tailor's shop, furnish regular occupation to those women who are competent, or may be trained, and who are not needed for employment in the wards.

In the matter of amusements, the long winter evenings, from October to April, are taken up with a variety of entertainments in the spacious amusement hall: dances, concerts, lectures, stereopticon views, "At Homes," etc., make a very pleasing diversion for five nights in the week. In summer the excellent band of the asylum, under Dr. Sippi's accomplished leadership, gives a weekly promenade concert from 7 to 8 p.m.; while football, baseball, cricket, quoits and other sports furnish ample diversion and relaxation to patients and attendants alike at other times.

The medical staff includes:—Medical Superintendent, R. M. Bucke, M.D.; Assistant Medical Superintendent, H. E. Buchan, M.A., M.D.; 1st Assistant Physician, Frank Beemer, M.D.; 2nd Assistant Physician, A. T. Hobbs, M.D.

Dr. Bucke has just completed his term of office as President of the American Medico-Psychological Association; the most distinguished society of alienists on this continent. H. E. B.

MEETING OF THE INTERNATIONAL ASSOCIATION OF RAILWAY SURGEONS.

WELCOME! A right hearty welcome to the railway surgeons of America. It is true that physicians are all akin, no matter from what land they come, and can fraternize through the promptings of professional interests and likings; yet the added influence of the mother tongue, common to Americans as well as ourselves, together with similar strains of ancestry, make the meetings of a representative American Medical Association in Toronto peculiarly pleasing to the physicians of Ontario. This kindly feeling is blended with admiration for the attainments of our visitors. We know that they are in the foremost rank of the living acting surgeons of to-day and are men of brilliant intellect and sound judgment. We are sure that, with such a learned array of surgeons, the scientific results of the Toronto meeting will equal the best of the annual meetings that have been held in different States of the Union. Speaking for the staff of this journal, we feel much pleasure in expressing the earnest hope that our

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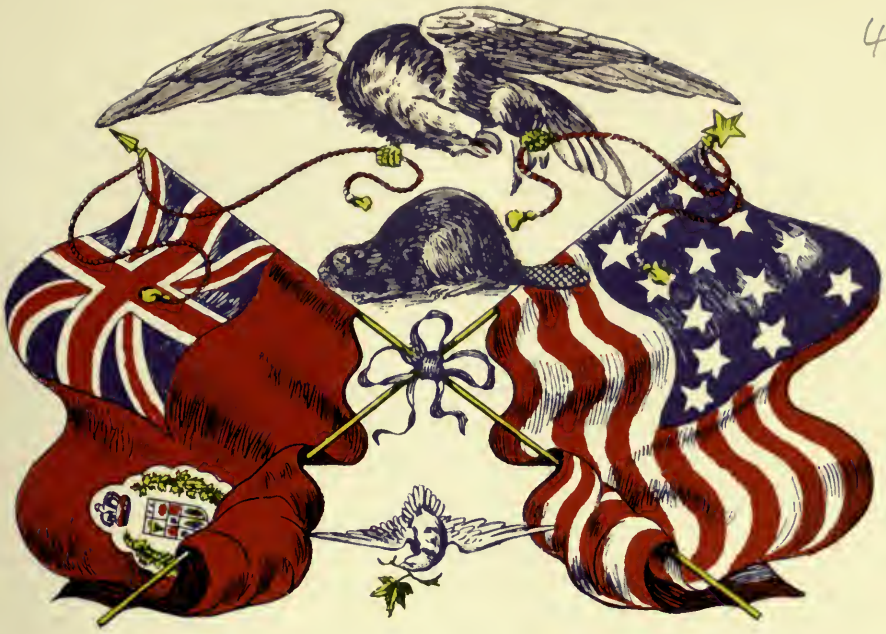


THE WELCOME OF "THE CANADIAN JOURNAL OF MEDICINE AND SURGERY"

TO THE

International Association of Railway Surgeons,

TORONTO, JULY 6th, 7th and 8th, 1898.

From the Old South's plantations, or dim Sierra's snow,
Or lonely Yellowstone, you gather here :
But alike from plain or desert, or mystic Mexico,
To all a British welcome most sincere.

The meteor-flag of England in royal splendor falls
Beside Columbia's colours, floating forth :
The red cross of Saint George—yet not to arms it calls ;
But waves a sign of peace, along the North.

Of peace, although the cannon upon the Spanish Main
Are roaring o'er the roll of battle drums ;
The pride of race is with us as those squadrons close again,
And from their smoke a dream of EMPIRE comes.

Not in that martial vanguard you keep your daily post—
Not in the silken boudoirs of the rich—
But at the smoking train-wreck a part as brave you boast
Beside the injured at a shattered switch.

In the white mountain passes, the washout and the storm,
Beneath the broken trestle, fallen bridge ;
Called to as stern a duty, yours is it to perform
A strong man's trust—and yours the privilege !

EZRA HURLBURT STAFFORD, M.D.

Supplement to the July issue of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY, Toronto.

visitors may bear away with them to their homes in the United States friendly recollections of their Canadian brethren and the land of the Maple Leaf. It is a great pleasure to learn that our valued collaborator, Dr. Bruce L. Riordan, is chairman of the Committee of Arrangements of the meeting. The position is an onerous one; but we feel confident that Dr. Riordan will accomplish the duties of his office with credit to himself and his confreres, and so satisfactorily to the visiting members of the Association, that, at no distant day, we may have the pleasure of seeing the Stars and Stripes and the Union Jack intertwined at another representative medical gathering. J. J. C.

ISOLATION IN LEPROSY.

An interesting letter on this subject has been recently published by Dr. Ashmead, of New York, in the *Indian Lancet* of Calcutta. Dr. Ashmead, who attended the Berlin Leprosy Conference last October, made it his principal object to endeavor to obtain universal means of isolation, and therefore wished to stir up the different governments. He contended, that leprosy could be easily kept out of America, if European, Asiatic and South American governments would provide lazarettos and enforce regulations for the detention of lepers in them. Dr. Ehlers, of Copenhagen, Dr. Hansen, and the non-contagionist group from London opposed these views.

Now that immigration from Europe and Asia is beginning to flow strongly towards this country, Canadians, as well as Americans, are interested in preventing the advent of foreign lepers to America. There is not much native leprosy in Canada, any existing cases having occurred principally among the Acadian population in the Maritime Provinces of the Dominion. In 1896, Dr. Smith, physician of the lazaretto at Tracadie, New Brunswick, the only institution of this kind in Canada, reported, that leprosy had died out in the village of Tracadie; in two or three old districts he found two or three cases awaiting admission to the lazaretto. He thought this condition of affairs due to strict precautions and effective segregation of patients. There were in all nineteen patients —thirteen males and six females.

Lepers may, however, find their way to Canada from Iceland, Norway, China, and other countries. Last year, in fact, three lepers escaped from Iceland and found their way to Manitoba. We understand, that they have been sent to Tracadie, through the

efforts of the Provincial Board of Health of Manitoba. We do not think this disease will ever make much headway in Canada, for the simple reason that Canadians are instinctively contagionists, and would not tolerate the appearance in public of persons, bearing undeniable marks of leprosy. It is not so, however, in other countries. For instance, Dr. Ehlers states in a letter, which appears in *La Presse Medicale*, May 14th, 1898, that lepers may be recognized at the offices of specialists in Paris, and also at the hospitals in that city. He also states, that anyone familiar with the appearance of the lesions of leprosy can easily recognize cases of the disease, and mentions travelling in June, 1897, between Cannes and Nice in the same compartment of a railway carriage with a male leper, who expectorated freely and was incessantly scratching the leprous ulcers with which his face was covered. Also, that in May, 1898, when he was returning from Spain, he lunched at the refreshment counter of the Hendaye railway station beside a leprous woman, covered with open leprous ulcers.

The fact that lepers travel about without hindrance in France and Spain, would induce one to think, that, with care and cleanliness, ordinary cases of leprosy are not contagious. This is the opinion of Dr. G. A. Hansen, of Bergen, Norway, who says, in writing to Dr. Hewitt, of Minnesota, that leprosy is not likely to spread in America, on account of the cleanly habits of the American people—a consoling reflection for Canadians, who may claim to be as cleanly in their habits as their neighbors. But, whatever views may be held on the contagionist or non-contagionist side of the leprosy controversy, it is quite certain, that no person known to be a leper would be allowed to live with or travel about in company with healthy people in this country. There is but one place for such an unfortunate person, and that is the Tracadie Lazaretto.

Taking a leaf from Dr. Ehler's experience in Spain and France, we think that our medical quarantine officers should be familiar with ordinary forms of leprosy, so that, in future, the introduction of lepers as emigrants to Canada may be arrested in time.

J. J. C.

THE ONTARIO MEDICAL ASSOCIATION.

ANOTHER meeting (the eighteenth) of the Ontario Medical Association has passed. The attendance was exactly the same as that of the '97 meeting. The papers, most of which will appear within the next few months in the medical journals, were, as a rule,

most practical. The clinic at the Victoria Hospital for Sick Children was a new feature on the programme, and relieved what might have otherwise been perhaps tedious work. There were a number of papers and demonstrations of special interest. The Pathological exhibit, contributed mainly from the medical colleges, was another new feature and very instructive. The entertainment programme, under the superintendence of Dr. Ryerson, was varied and enjoyable. The smoker, the luncheon, the street-car excursion about the city, the sail on the *Oriole*, and the private receptions, contributed greatly to the pleasure of the outside members and guests.

There were present: Drs. Adami, of Montreal, who carried cordial greetings from our Quebec confréres; E. L. Shurley, of Detroit, President of the Michigan State Medical Society, and Frank P. Foster, of New York, who presented the goodwill of our American brethren.

The action of the Association in re-endorsing the reciprocity scheme was commendable, and its resolution respecting the health of school children one of the most important features of the work done in committee.

Next year the Association is announced for Toronto, the first Wednesday and Thursday of June, and the President is W. J. Gibson, of Belleville.

For the benefit of those of our readers who were not able to be present at this year's meeting, we give in this issue two full page half-tones, one of a photograph taken by flash light of the interior of the Banquet Hall at the R.C.Y.C., where the annual luncheon was held, and some snap-shots taken on board the *Oriole*, so courteously granted the Association by Mr. George Gooderham, on the second afternoon of the Convention. W. A. Y.

ANOTHER SANATORIUM FOR CONSUMPTIVES.

A MOVEMENT is being made by some medical practitioners and others in Toronto, to provide a sanatorium for consumptives a few miles out of the city on one of the trolley lines, on which there are elevated sites, so that city and county patients can be easily visited therein by their physicians and their friends.

It is intended that it shall be a first-class institution in every respect, on an economical cottage plan. And the promoters state

that provision will be made for the poorer classes, and patients in all stages of the disease, with the hope of checking its progress even when considerably advanced in the second stage, as sometimes has been done; and also for a home wherein the last days of hopeless sufferers may be relieved of their most distressing symptoms and made as comfortable as possible, and not be a source of danger to their relatives and others.

It is also the intention, it is said, to have a piece of farm or garden land in connection with the Sanatorium, on which certain patients who would be benefited by such exercise may be engaged and so help to provide farm and garden food-stuffs for the institution.

Though, as our readers are all aware, we are strongly opposed to the multiplication of charitable institutions in and around Toronto, the large majority of which tend to simply beggar the ordinary practitioner, yet such a project as this should, and doubtless will, appeal so strongly to the charitable public of Toronto and its vicinity that there should not be much difficulty in securing sufficient funds to carry it to a successful issue.

W. A. Y.

GO AHEAD, COMMITTEE.

At a meeting of the Toronto Medical Society on Thursday, 26th May, the following resolution was moved by Dr. W. J. Wilson and seconded by Dr. H. H. Oldright and carried unanimously:

"*Resolved*—That in the opinion of this Society no one should receive free treatment as an in-door patient in our public hospitals except those receiving their hospital maintenance from the municipality to which they belong."

A committee composed of Drs. Wilson, B. E. McKenzie and T. F. MacMahon was appointed to confer with the other Societies and in other ways further the interests of the resolution.

Dr. D. C. Meyers has been promoted to be adjutant in the Royal Grenadiers.

Dr. H. J. Hamilton, of Church Street, was married on the 21st of last month.

Dr. William Lehmann has resigned his captaincy in the Royal Grenadiers, retaining rank.

Dr. Joachim Guinane was married last month and will reside at the corner of Mutual Street and Wilton Avenue.

The Physician's Library.

BOOK REVIEWS.

A Treatise on Aphasia and other Speech Defects. By H. Charlton Bastian, M.A., M.D., F.R S. London: H. K. Lewis. 15s.

Since the earlier researches of Broca in this field, more and more attention has been given to the subject; and to the literature of this branch of nervous disease the present work is an exceedingly valuable addition; not only summarizing, as it does, the progress already made, but giving the careful results at which the writer, himself a high authority, has arrived.

While indispensable to the alienist, the work will also be acceptable to the general practitioner, being written in a singularly lucid style. Sufficient physiological and psychological data are given to enlighten, but not to exhaust, the reader, preliminary to entering upon the subject in hand: the author having wisely avoided the method, which seems to be a peculiarly German one, of thoroughly fatiguing the reader through the first three hundred pages with irrelevant minutiæ and aimless digressions which arrive at nothing, and prove nothing but the writer's conscious erudition.

Having stated the relations which exist between Thought and Language, the writer proceeds to classify the various forms of Speech Defects, and in the chapters on Structural Disease in the Auditory and in the Visual Word Centres, records a large number of singularly interesting cases which throw much new light upon a subject always more or less confusing to the general practitioner. In the concluding chapters the Etiology, the Diagnosis, the Prognosis and the Treatment of Speech Defects are taken up; and in these pages the results of many years' close study are vouchsafed. The evidences of untiring care and inexhaustible patience are marked on every page of the book, which we feel justified in designating as a great work; and upon a subject of the first importance, having so intimate a bearing upon many obscure nervous lessons which have for too long a time been comfortably left in their obscurity.—E. H. S.

The State Hospitals Bulletin. A Quarterly Report of Clinical and Pathological work in the State Hospitals for the Insane (New York), and the Pathological Institute. Published by authority of the State Commission of Lunacy. Utica State Hospital, N.Y.

This publication is well known in Canada, and has since its first appearance, two years ago, been regarded with great favor by the members of the profession who have made a specialty of mental and nervous diseases. In the last annual report of Ontario Asylums, Dr. C. K. Clarke, of Rockwood Asylum, made apt reference to the Bulletin as a work which might be imitated with great advantage in Ontario, a suggestion which rather indicates the favorable reception which has been accorded the Bulletin, than any really imperative need for a similar publication in a Province where the chief activity among alienists seems at present to be either wholly gynecological or wholly anti-gynecological, and to begin and to continue and to end in activity.

The steady growth of the publication has exceeded even the anticipations of those most favorable to it. With the next (third) volume it will be issued under the new title, "Archives of Neurology and Psycho-Pathology," and with this wide scope, and the almost unlimited material at its disposal, a career may be predicted for it as brilliant and as long continued as that of the American Journal of Insanity or the Alienist and Neurologisy, the two leading periodicals of the sort, by all odds, in the world.

In glancing over the volumes already published, one is struck by the

immense field covered by the Bulletin. The latest steps in pathological research are minutely described, and the results of the latest methods in the treatment of the insane are particularly set down. Many of the articles are as exhaustive as special monographs; and that group of questions which cluster about the study of Insanity, such as Criminal Anthropology and Inebriety receive thorough treatment by experienced pens. Illustrations are very numerous and the paper and press could not be improved.

To say much in little, the Bulletin has in its "experimental stage" proved a library of the latest information upon Mental diseases, and transformed as the "Archives of Neurology and Psycho-Pathology," it will prove indispensable to the alienist and of exceptional value to the general student of neurology.

E. H. S.

International Clinics. A Quarterly of clinical lectures on Medicine, Neurology, Surgery, Gynecology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology; and specially prepared articles on Treatment and Drugs, by professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M.D., University of Pennsylvania, Philadelphia; J. MITCHELL BRUCE, M.D., F.R.C.P. London, Eng.; and D. W. FINLAY, M.D., F.R.C.P. Volume I., Eighth Series, 1898. Philadelphia: J. B. Lippincott Co. Montreal: C. Roberts, 593A Cadieux Street.

Amongst the formidable looking, but certainly influential array of contributors to this work are found the names of such men as Byron Bramwell, of Edinburgh; C. G. Cumston, of Tufts College; J. Abbott Cantrell, Professor of Diseases of the Skin in the Philadelphia Polyclinic; W. S. Davis, of Chicago Northwestern University Medical School; H. O. Walker, of Detroit College of Medicine; C. G. Stockton, of Buffalo University; Paul F. Mundé, of New York; J. M. Matthews, of Louisville; Alex. James, of Edinburgh, and many others.

The contents of Vol. I. include Clinical Lectures on Drugs and Remedial Agents; Treatment; Medicine; Neurology, Surgery, Gynecology, Ophthalmology, Laryngology, Rhinology and Dermatology. We have not often seen a work which shows such superior mechanical excellence. The type is large, easily read and well spaced, the paper is good, and the illustrations are all exceedingly clear and render the perusal of the lectures much more enjoyable and consequently add to the interest of the reader. The idea of the publishers in giving the profession the benefit of clinical lectures delivered by some of the "stars" in our calling was a most happy one. It is little wonder that it became necessary to publish not only a second but an eighth edition of the book. There have been many additions made to the text, some of the chapters being longer than in the last, and others entirely re-written. The profession will find the new International Clinics a valuable addition to their book shelves.

A System of Medicine by many Writers. Edited by THOMAS CLIFFORD ALLBUTT, M.A., M.D., LL.D., F.R.C.P., etc., Regius Professor of Physic in the University of Cambridge, etc. Vol. I. London: Macmillan & Co., Limited. New York: Macmillan & Co., 1896. Toronto: A. P. Watts & Co., College Street.

We have to acknowledge with thanks the courtesy recently extended to us by the publishers of this splendid system of medicine in being favored with a handsomely bound set of the work, Vols. I. to IV. The favorable impression created from the very first by this work has rendered the sale up to the present very large indeed. So much so, that the purchaser in receiving each volume as it comes out, awaits anxiously for the next. Vol. I. is devoted to Prolegomena and Infectious Diseases. Amongst the former are included Medical Statistics, by Dr. Billings; Anthropology and Medicine, by Dr. Beddoe; Temperament, by Dr. Rivers; The Laws of Inheritance in Disease, by Mr. Hutchinson; Medical Geography of Great Britain, by Mr. Haviland; Inflammation, by Dr. Adami; The Doctrine of Fever, by Dr. Burden Sanderson; The General

Pathology of Nutrition, by Dr. Mott ; The General Pathology of New Growths, by Mr. Shattock and Mr. Ballance ; The Principles of Drug Therapeutics, by Dr. Leech ; besides other chapters of equal interest. Under Division 2, Part I, that of Fevers, deals with Insolation or Sunstroke, by Sir Joseph Fayrer, and under Part II., that of The Infections, such subjects as : The General Pathology of Infection, by Dr. Kanthack : Septicæmia and Erysipelas, by Mr. Watson Cheyne ; Infective Endocarditis, by Dr. Dreshfeld ; Puerperal Septic Disease, by Dr. Playfair ; Furuncle, by Dr. Melsome ; Epidemic Pneumonia, by Dr. Whitelegge ; Influenza, by Dr. Goodhart ; Diphtheria, Tetanus, Enteric Fever, Cholera Asiatica, Plague and Relapsing Fevers are taken up and dealt with in a most concise and interesting manner. This is a book of value to every physician and we hope that the publishers will meet still with the same hearty response from the profession in the constantly increasing demand for Allbutt's System of Medicine.

Operative Gynecology. By Howard A. Kelly, A.B., M.D., Fellow of The American Gynecological Society ; Professor of Gynecology and Obstetrics in The Johns Hopkins University, Baltimore ; Gynecologist and Obstetrician to The Johns Hopkins Hospital, Baltimore ; formerly Associate Professor of Obstetrics in The University of Pennsylvania, etc., etc. With 24 plates and over 550 original illustrations. Vol. I. Toronto : George N. Morang, 63 Yonge Street, 1898.

In the usual amount of space allotted in medical journals to review a work, it is a physical impossibility to elaborate or detail the merits of any particular book at such length as in many cases is certainly well deserved. Some works published receive their just deserts in a few words of condemnation, others are received with universal praise. Reviewers of books should be quite impartial, it being but fair that the publisher of any particular work have, if necessary, pointed out to him, when being "weighed in the balance," just where he has been "found wanting." In Howard Kelly's work, however, to the publication of which the entire professional world has been looking forward, it is quite unnecessary to go on the "still hunt" for deficiencies or errors, as of such there are none. Of this work it can therefore be said, it has been "weighed in the balance and *not* been found wanting." It is a pleasure at any time to peruse leisurely any book in which special attention and care have been given to its illustrations ; but when one gets a book in which unusual magnificence, and we might almost say positive extravagance (if such were possible) had been lavished upon the illustrations of cases under discussion, especially when much time and labor had been expended upon them in having them drawn from the original cases, it is a difficult matter to put such a book aside. We do not know of any volume where such attention and care has been given to the drawings. The author in writing the work desired to place in the hands of the professional world a convenient summary of the various gynecological operations which he has found most beneficial in his own practice. Dr. Kelly has not attempted to present a digest of the literature of his subject, or to describe all the important operations, but has summarized in such a manner as to carry out his original intentions in the matter. It is one of the duties almost (if we may so express it) of the gynecologist of to-day to accurately record his own experience and by that means benefit his confrères. Dr. Kelly has done this, and without attempting to even mention the many other excellent points of his work, we say candidly to one and all, "Get Kelly as soon as you can."

Atlas and Abstract of the Diseases of the Larynx. By Dr. L. Grunwald, of Munich ; authorized translation from the German. Edited by Dr. Charles P. Grayson, lecturer on Laryngology and Rhinology in the University of Pennsylvania ; Physician in charge of the Throat and Nose Department, Hospital of the University of Pennsylvania. 107 colored figures on 44 plates. Philadelphia : W. B. Saunders, 925 Walnut Street, 1898. Toronto : J. A. Carveth & Co.

By far the most valuable point about Dr. Grünwald's book is that each

colored illustration is accompanied by the necessary data in the form of a short history. On that account the reader receives almost the same amount of benefit from the careful perusal of each illustration as he would in the study of the case itself, if present. To the ordinary practitioner especially this is of unbounded service, as in many instances he has not the opportunity of seeing such cases in practice, and be able thereafter to diagnose them if they should come under his care. Another point of value is that the author has arranged the illustrations according to external appearances, thus comparing cases side by side and assisting diagnosis in a very material manner. The book will be found to have been written in such a way as to appeal not necessarily to the specialist, but to the general practitioner also.

Atlas of Legal Medicine. By Dr. E. Von Hofmann, Professor of Legal Medicine and Director of The Medico-Legal Institute at Vienna; authorized translation from the German. Edited by Frederick Peterson, M.D., Clinical Professor of Mental Diseases in The Women's Medical College, New York; Chief of Clinic, Nervous Department, College of Physicians and Surgeons, New York; assisted by A. O. J. Kelly, M.D., Instructor in Physical Diagnosis, University in Pennsylvania; Adjunct Professor of Pathology, Philadelphia Polyclinic; Visiting Physician to St. Mary's and St. Agnes' Hospitals; Pathologist to the German Hospital, Philadelphia. 56 plates in colors and 193 illustrations in black. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Toronto: J. A. Carveth & Co.

We ask the question, "Is there any department of medicine in which carefully drawn illustrations are becoming more and more necessary every day, than in that of Legal Medicine?" We at once answer, no. In ordinary text books on medical jurisprudence, this idea cannot conveniently be carried out, therefore there is all the more need of an atlas on so important a subject. It is little wonder that the other Atlases published by W. B. Saunders & Co. have received such recognition all over this continent,—they have shown such a high degree of excellence. This work of Drs. Peterson and Kelly at once places within the reach of all a book giving most graphic illustrations of the principal cases of medico-legal interest. The illustrations have been prepared from cases or recent museum specimens. The author has not attempted to go into the subject by giving exhaustive accounts of cases as a whole, but has devoted most space "to portray instructive instances of at least the most important medico-legal occurrences." Plates 7, 15, 16 and 21 could not be improved upon. We recommend this atlas to not only coroners, but the profession generally.

MAGAZINES RECEIVED.

The Sanitarian. Published monthly. The American News Co., New York, general agents. Price, $4.00 a year; 35 cents a copy. The June number contains the following articles: "Climate, Health Resorts and Spas of Canada," by T. G. Roddick, M.D., M.P.; "Sanitaria for the Treatment and Prevention of Tuberculosis," by Harold Bryn, M.D.; "Benefit of Water Filtration," by John W. Hill, C.E.; "Non-Contagiousness of Yellow Fever," by A. N. Bell; "Quarantine Regulations—Convention Report"; "Experiments with Formaldehyde as a Disinfectant," by E. M. Parks, M.D.; "Use of Formaldehyde in House Disinfection," by David D. Brough, M.D.: "La Maladie du Sommeil—A New Disease"; "National Health Service—Bill Reported by Committee on International and Foreign Commerce"; "The Ninth International Sanitary Congress"; "Some Public School Needs," by Austin Thorndike.

[PUBLISHERS' DEPARTMENT.]

TANNOFORM.

THE use of tannoform, a product of condensation obtained from formaldehyde and tannic acid, which has already been referred to on previous occasions (*vide* Merck's Report 1895, p. 13, and 1896, p. 148), has been considerably extended in the course of last year. This is attributable not only to its influence on hyperidrosis and bromidrosis but also to our improved knowledge of the therapeutical properties of this substance, by virtue of which it is an excellent astringent and antiseptic medium adapted both for internal treatment of catarrhous affections of the intestinal canal and for external application in wounds and skin diseases.

The specific action of tannoform in hyperidrosis and bromidrosis is acknowledged by all, without exception, who have tested its properties. I will here only mention the most recent publications, viz.: Weiser (Therap. Wochenschrift 1897, No. 46, p. 1187), Carl Sziklai (ibid. No. 41, p. 1050), Paul Richter (Allg. med. Central-Ztg. 1897, No. 73, p. 928), A. Hoff (Aerztl. Central-Anz., Vienna, 1897, No. 24), J. Munk (Aerztl. Central-Anz., Vienna, 1897, No. 35), M. Kortüm (Aerztl. Central-Anz., Hamburg, 1897, No. 38, p. 397). Dr. Leop. Herz, of Prague, in a private communication describes tannoform as a sovereign remedy for intertrigo. In the communications of other medical correspondents it is stated that 10 per cent. tannoform ointment forms an excellent remedy for erythema solare, which is a source of much discomfort to certain individuals while exposed to the influence of sea-air. Hoff cured cases of badly ulcerated balanitis by means of tannoform within 48 hours, he also found the preparation to be a most efficient means of treating decubitus, ulcera cruris and buboes. This writer also refers to the great value of tannoform for troops on the march, since it renders galled feet immediately fit for marching. J. Munck found tannoform to be useful also in the following cases: (1) in fresh wounds covering a moderate area and in superficial ulcers, (2) in weeping eczema, intertrigo and excoriations, (3) in ordinary ozaena and pharyngitis, (4) internally applied as a remedy for diarrhœa, intestinal hæmorrhages and clumps of piles.

For the latter Munck recommends the following prescription:

℞. Tannoformii 2.0 (gr. 32)
Extr. Belladonnæ 0.10 (gr. $1\frac{2}{3}$)
Butyri cacao, a sufficiency
To be made up into 10 suppositories.
2 suppositories to be applied daily.

Sziklai goes so far as to ascribe to tannoform a life-saving power when given internally to children suffering from severe diarrhœa. This is also confirmed by J. Braun (Therap. Wochenschr. 1897, No. 46, p. 1189).

THE IMPORTANCE OF WILL-MAKING,

MEDICAL men will at once allow that in the years of their practice they have come across many cases where a great deal of unnecessary suffering has been caused through the neglect of people making their wills in their days of health. Families have many times been left in most embarrassing positions by such neglect and have been caused in some cases months of discomfort, which could have been prevented by a little foresight.

Many people struggle to accumulate property during life, but do not give sufficient consideration to its disposition after death, even postponing this simple duty of making a will until too late. No doubt the delay in making a will frequently arises from inability to select an executor of requisite ability and integrity, more particularly if a trust is created under the will, and even when a suitable person is selected, the grave doubt is always present whether such persons will live to execute the trust.

The Toronto General Trusts Company was established expressly to remove such doubt and to meet all requirements in respect to security, continuity of service, and efficiency in management. The Company therefore confidently solicits the appointment, under wills, of executor and trustee.

Confidential interviews upon all trust and estate matters are invited.

The Toronto General Trusts Company also acts in all trust and fiduciary capacities. It is qualified in every way to take charge of assets both before and after the death of the owner. There are many advantages in putting the management of financial affairs in the care of the Company, either as trustee or agent for the purpose of making investments, collecting interest, rents, etc.

The Board of Directors are leading business men of the highest character, whose integrity and standing in the community afford the amplest guarantee that all business entrusted to the Company will be faithfully managed.

Special attention is called to the fact that all trust funds and investments are kept separate and apart from the assets of the Company; the records of each individual trust show the assets belonging thereto.

The Canadian Journal of Medicine and Surgery

A JOURNAL PUBLISHED MONTHLY IN THE INTEREST OF MEDICINE AND SURGERY

VOL. IV. TORONTO, AUGUST, 1898. NO. 2.

Original Contributions.

NOTES ON A CASE OF ACUTE ŒDEMA OF THE NECK.

BY A. J. HARRINGTON, M.B., M.R.C.S., ENG.

PATIENT fifty years of age, was struck transversely just below the thyroid cartilage by a lever which was attached to a shunting machine. He was stooping over at the time and the lever flew up and struck him with great force. It was exceedingly painful at first, but did not interfere greatly with his breathing. He was taken home, a distance of about a mile, and when they got him in the house his neck was very much swollen and his breathing very asthmatic in character. The respiration became worse. I was sent for, and when I arrived he was unable to speak, and all that I could learn was that he had got a blow in the front of the neck. His neck was very much swollen from the chin to the sternum and very hard. Seeing his desperate state I at once sent for assistance. His condition grew graver every minute and his breathing very labored; his wife and I held him upright to enable him to get his breath. His struggles to get an inspiration were desperate. I saw I could not wait for help, so getting his wife and a young man, a neighbor, to hold him upright I cut right down to the trachea, put in my unwashed fingers and got hold of the trachea and intended to open it, but by pulling it forward the act allowed air to reach the lungs, and I found his dyspnœa relieved and his speech returned. My first incision was in the mesial line, over the cricoid down through the deep layer of the deep cervical fascia. The hæmorrhage was rather alarming as the subfascial spaces were engorged with blood from ruptured vessels

caused by the injury, but after the first gush—the respiration being established—the engorged veins were soon emptied. Dr. R. J. Wilson arrived, and as I had had no chance of taking any antiseptic precautions heretofore, we washed out the wound and packed it with gauze and put on a light dressing, and advised him to lie face downwards as much as possible. As he was a patient of Dr. Little's the case was handed over to him, and he made an uneventful recovery.

This case has many interesting points. I was called in and could get no history of what had occurred. The man was dying from dyspnœa. His neck was turgid—swollen from chin to sternum to such an extent that the head was retracted—and was very hard. I had no instruments except a small pocket case, so I sent for assistance and tracheotomy tubes, but when Dr. Wilson arrived with them it was fortunately unnecessary to use them. The hæmorrhage was very copious, so much so that I was covered with it and my left arm sleeve was filled with blood; and then, on account of the swelling, the trachea was fully two inches deeply situated and was difficult to find. The dyspnœa was caused by the direct violence of the blow and increased by the effusion into the interfascial spaces. An operation like this with time and everything at hand is a simple procedure; but under the circumstances that surrounded this case it was an extremely trying ordeal, and you can easily imagine my relief on seeing the favorable termination of this case—the hard, brawny neck giving place to its ordinary contour in a few seconds.

THE trustees of the Toronto General Hospital have selected the following graduates to act on the house staff for the coming year: From Toronto University Medical School—Harold Anderson, John McCrae, Donald McGillivray, G. A. Sutherland, W. C. White. As alternates—A. A. Shepard and B. C. Bell. From Trinity Medical School—F. H. Bethune, Colin Campbell, W. E. Graham, Norman E. Farewell, C. M. Stewart. As alternates—A. T. Brown and George C. Munro.

THE following students have passed the final examination, fifth year, of the College of Physicians and Surgeons of Ontario: A. H. Addy, Tapleytown; T. Bradley, Georgetown; A. I. Brown, Beachville; H. O. Boyd, Bobcaygeon; J. T. Clark, Foxboro'; G. Cairnes, Berlin; J. H. Elliott, Hampton; N. E. Farewell, Oshawa; J. Grant, Toronto; W. E. Graham, Smith's Falls; W. Hackney, Farquhar; G. A. Hassard, Orangeville; J. A. Klotz, Ottawa; J. M. Macdonald, Toronto; R. McKenzie, Toronto; H. Maw, Georgetown; S. Moore, Keewatin; J. A. Morgan, Rosseau; G. Mylks, Kingston; T. A. McCormick, Rosseau; A. W. P. McCarthy, Stapleton; D. McGillivray, Uxbridge; F. P. McNulty, St. Catharines; W. Pallister, New Dundee; J. Shultis, Rockwood; C. M. Stewart, Ailsa Craig; F. W. E. Wilson, London; W. L. Yeoman, Mount Forest.

Proceedings of Societies.

THE INTERNATIONAL ASSOCIATION OF RAILWAY SURGEONS—1898 MEETING.

THE International Association of Railway Surgeons met for their eleventh annual meeting at the Normal School on July 6th. Some six hundred surgeons of experience in railway work were forgathered from all over the continent and debated points of interest in their specialty. The meeting was a pronounced success. The numbers were most satisfactory, the proceedings of the convention interesting and valuable, and the welcome extended was, we think, very cordial. The first evening a public meeting was held, at which the dominant characteristic was the frequent mention of an Anglo-Saxon alliance and the enthusiastic cheers which it provoked.

Dr. Bruce L. Riordan, as Chairman of the Committee of Arrangements, opened the meeting shortly after ten o'clock, and called upon the President, Dr. George Ross, of Richmond, Va., to take the chair. Dr. Ross, a soldierly-looking, elderly man, with a white moustache and chin beard, called upon Rev. Dr. McCaughan for an opening prayer, and this constituted the opening ceremony.

THE ASSOCIATION'S FINANCES.

The reading of the minutes were dispensed with, and proposals for membership followed. Dr. E. R. Lewis, of Kansas City, the Treasurer, read his report, which dealt with this question. During the past year 886 registrations have been made, 447 registrations having taken place for the present year, making a total of 1,199 registrations since the books of 1897 were closed. This is the best beginning of any year in the Treasurer's experience.

"Notwithstanding the humanitarian war our States are to-day engaged in," said the report, "our members are, without exception, deeply interested in our philanthropic work, and the large increase in our Canadian membership insures our continued proud position as the strongest surgical organization in the world known to the undersigned."

Dr. Lewis then discussed the finances of the Association. "Four years ago," he said, "when we were elected Treasurer, our indebtedness was about $500. To-day, July 1, we have in the treasury about $833.65, with but few bills to be deducted." They had at the moment, Dr. Lewis added, about $1,200 or $1,300 in cash on hand. The report was dealt with through the usual channels.

Physical Examination of Employees.

No other business came up, and Dr. G. P. Conn, of Concord, N.H., read his paper on "Physical Examination of Railroad Employees, and its Medico-Legal Significance." After quoting the dictum that the common carrier is liable to all losses sustained through its own neglect, but is not an insurer, Dr. Conn pointed out that the corporations owe duties to their servants, and from this deduced the theory that the railroad company should take pains to educate its employees. Extra hazardous labor requires extra diligence and care in the selection of employees, and the proper instruction and information of these employees, he said. From a recent decision in New Hampshire he made the following deduction: "This shows that employees occupying responsible positions, such as require the organs of vision and hearing to be acute, their habits and mental faculties to be without fault or blemish, must from time to time be examined by those competent to determine their fitness to perform their service without danger to themselves, their fellow-servants or the public."

After saying that railway surgeons, especially those who are on lines with some form of a surgical organization, should be anxious to have their road effective in this particular, Dr. Conn went on to argue on behalf of a physical examination of applicants for positions on railways. His position was as follows: "(1) that a rigid physical and mental examination should be instituted before allowing new recruits to enter the service of railroads; (2) all roads should have a school of instruction in which new recruits should be thoroughly drilled in the work which they are to perform, so as to bring out the best results of all safety appliances and also those intended to supply the heating, lighting, ventilating and cleaning of cars; the intention of this being to simply enlarge the school of instruction in the use of automatic brakes that is now practised on most large roads, and which might without much additional expense be made a part of the standard of education; (3) that the recruit after being thoroughly instructed in every duty that can in any way serve to sender the lines and property of all concerned more nearly safe and comfortable, and having passed an examination, he should be advised of the fact that in taking service upon a railroad he is entering upon a vocation extra hazardous in its nature, but, having been thoroughly instructed in his work and given an opportunity to learn its duties, he must take a certain amount of chance of his life and limb without recourse or damages."

Dr. Conn stated in amplification of these points that he would have the examination as rigorous as that for the United States army.

The discussion which followed was of considerable length. Dr. H. L. Getz of Marshalltown, Ia., emphasized the need for a rigid

examination. The ordinary examinations for sight and hearing were useless, he said; the men should be stripped and thoroughly examined. He dissented from Dr. Conn's suggestion as to the rigor of the examination; for instance, he did not think that the loss of an index finger should disqualify a man for employment on a railway. Dr. W. S. Hoy, Wellston, O., observed that his State has adopted a physical examination. Dr. Currie, of Toledo, spoke of the methods adopted. Dr. Pepler, of Toronto, concurred in Dr. Conn's suggestions. Dr. Hungate, of Nebraska, gave two or three specific instances which bore out Dr. Conn's point. Dr. W. D. Middleton, of the Rock Island Line, stated that it had found it necessary to adopt a physical examination. Dr. J. M. Dodson, professor of physiology in the Rush Medical College, Chicago, raised the question as to whether the average doctor is competent to conduct such an examination. He suggested that instruction in the diagnosis of the normal subject be included in the curriculum of the medical college.

AFTERNOON SESSION.

The association opened its session at 2.30 o'clock. Some business was transacted, a number of committees being appointed. The committees were composed as follows:

Nominating—Drs. S. C. Benedict, Georgia, Me.; B. L. Riordan, Toronto, Ont.; G. P. Conn, Concord, New Hampshire; W. D. Middleton, Iowa; H. M. Taylor, Virginia; E. L. Kincaid, Texas.

Necrology—J. H. Letcher, Kentucky; T. T. Earle, South Carolina; J. G. Broduax, North Carolina.

Judiciary—H. L. Getz, Iowa, Chairman; W. R. Brock, Virginia; L. Keller, Ohio; G. R. Dean, South Carolina; S. R. Miller, Tennessee; W. B. Outtier, Missouri; S. I. Bouffleur, Chicago; B. Thompson, Iowa; F. C. Vandervoort, Illinois; H. P. Merrill, Maine; W. D. Hilliard, North Carolina; John Eddy, New York; C. Plumbe, Nebraska; R. L. Bocock, Alabama; T. L. McCarthy, Kansas.

The President then read his annual address. After a general introduction and a reference to the wonderful achievements of medical and surgical science, he passed to a consideration of the means taken by railway corporations to cope with disasters. He referred to the special duties which fall upon the railway surgeon, and expressed his pleasure at the recent change of the association's name to "International." He expresed his pleasure at meeting in Toronto, of which he spoke in terms of warm praise. He concluded with a reference to "the half-prophetic declaration recently made by the Hon. Mr. Chamberlain," and a hope that Mr. Chamberlain's forecast would come to pass. "Nothing, surely, can be more conducive to an end so desirable as such gatherings as this, in a city extending such warm and cordial greetings as Toronto has extended to us."

A pregnant and deeply interesting address was given by Mr. B. B. Osler, Q.C., one of the counsel of the Grand Trunk Railway, upon "The Surgeon in Court." In nearly all important cases connected with railway work the counsel and surgeon had their positions; the corporation was in their hands. He noted one great advantage which the counsel had over the doctor. The counsel was paid his fee, was expected to show his bias, and was not under oath. The surgeon was paid his fee and still was expected not to show bias, was expected to conceal it—under oath. (Laughter.) It was a very difficult task, Mr. Osler said. The surgeon had at bottom his honesty and sense of professional propriety, and yet was retained as the professional adviser of the railway corporation whose interests were committed to his hands. He had to consider his position, and had to be ready for cross-examination, sometimes at the hands of a counsel who had studied more law and facts than ethics. (Laughter.) He had to meet the claims lawyer and the claims physician. It was a matter for comment in the profession that doctors rarely agreed, that they often differed as widely as counsel, though they were under oath. It was one of the hardest positions a doctor could occupy, and he had seen, Mr. Osler observed, amid laughter, doctors wishing themselves in the foulest sick room, rather than in the pure atmosphere of a well-ventilated court room.

The surgeon had to bear in mind, Mr. Osler went on, that in his duty to the sick and maimed that were under his care some difference arose from the fact that he had not been called in by the sick man or his relatives, but had been sent as the railway surgeon, sent by the corporation. His duty was at once to the corporation and to the sufferers immediately under his care. There was, however, no privity between the patient and the doctor in such cases. The doctor owed two loyalties, one to the patient, one to the corporation. If it was only to the patient there are many things the doctor ought not to tell, but owing a duty as he does to the corporation, he must report many things which were pertinent. In that case it was no breach of professional etiquette or propriety for the surgeon to reveal these facts. It would be such a breach if the physicians had been called in by the patient or his friends; but being in the corporation's pay, as long as the patient's friends chose to leave him under his care, his first duty was to the corporation. In such a case they were at liberty to give information, which it would be improper for them to give if they were there only in the interests of the patient. In Ontario the relations of physician and patient were not privileged. In court they must consider the fact that privilege does not exist, and that they were bound to answer all questions in relation to the sufferer and claimant. The courts of Ontario had decided that where the employer engaged the surgeon he was entitled to the information that relates to the case.

The question of expert testimony, Mr. Osler went on, had passed almost into a current joke. In his experience the difficulty was not so great, and was being greatly removed. In his experience

there was no better way yet devised of getting at the truth, than cross-examination and the placing of opposing experts in the box. Alluding to the expedient of appointing medical experts by the court, Mr. Osler observed, that to some extent this was done in Ontario. A medical expert so appointed by the court could afterwards be called by one side or the other as witness. To make such an expedient complete, Mr. Osler observed, the report of an expert so appointed should be received as a finality and so end the medical controversy. He did not think that this would be a better plan, though it would be more pleasant for the medical profession. The object of cross-examination was to get at the truth. There might be a hundred men who could make a report, and only ten who could stand cross-examination. The medical profession should try to eliminate that which had caused it to make a bad appearance before the public. He offered one or two suggestions as to how this might be done. First, any doctor going into the box to testify in chief should remember that there was a counsel on the other side who was crammed for the occasion, and who, perhaps, had a better knowledge of some of the details of the physical surroundings than the doctor had, through lapse of time. Thus, in the cross-examination, the lawyer might appear to know more about the matter than the doctor. The first duty of the physician was to prepare himself for the cross-examination, to freshen up on the subject. Then a doctor should have courage now and then to say, "I don't know." (Applause.) It would do him no harm; in fact it would do him a great deal of good, for the man with courage enough to say that would be the more apt to be believed as to what he said he did know.

The scandal of opposing expert testimony was being diminished year by year, Mr. Osler went on. The real remedy lay in the tone of the profession, in a high sense of professional responsibility. They were getting it more and more every year through the medical associations and the tone which they gave. When a man found that he could not be elected to positions of honor by his fellows, he naturally wanted to know why. They found that a young, energetic doctor, who was going into the box on the side of the claimant, was apt to be much more careful in his evidence when he saw in the court room a couple of seniors whom he honored and respected.

He had found, Mr. Osler added, in the last two or three cases he had been connected with, no necessity for calling in the railway surgeon, as expert testimony, because the doctors appearing for the claimants had been so moderate and reasonable in their statements of the damages sustained by the claimants. It was to the credit of the medical profession that the difficulty was being steadily overcome by the doctors themselves, by the better tone and standing of the medical profession as a whole.

Mr. Osler spoke for a few moments of the "railway spine" or traumatic hysteria, which causes so much trouble to railway surgeons and to lawyers. "Along the backbone hangs all sorts of frauds,"

he said, and he gave a graphic picture of how many a hard-pressed man has picked himself up from a minor railway accident with a "Thank God, at last some money is in sight," and has gone home, not to saw wood, but to get into bed and send for a claims lawyer and a young doctor. The subjective nature of the symptoms made the subject very difficult. His chief suggestion on this point was that the longer trials were deferred the better it was for the railway. Early examination for discovery, before the patient had had time to read up the symptoms, was of the greatest importance, as was early medical examination, to be followed by another such examination near the trial.

The railway surgeon, sometimes, especially the junior, is more or less a claims agent of the railway, Mr. Osler said next. They should never act in that capacity. (Applause.) They should never try to settle for the railway. That was none of their business. It was often convenient for the railway company to have the surgeon do it, but it was best not. The surgeon's duty was to the man before him, and the relationship was such that, though he was a railway agent, he should not be a claims agent. This class of settlement was looked on with grave suspicion by the courts and was often set aside to the great discredit of the doctors concerned.

Mr. Osler finished with a gracefully worded welcome to the visitors. "Remember," he said in conclusion, "that you are among your neighbors and among your friends—if you will have it."

Chloroform or Ether.

Dr. C. P. Gordon, of Dalton, Ga., followed with a paper on "General anæsthesia by chloroform or ether. Which? Local anæsthesia by cocaine or eucaine. Which? General or local anæsthesia in enucleation or extirpation of the globe of the eye. Which?" Dr. Gordon's paper was a vigorous upholding of chloroform as against ether, one feature of it being his declaration of his conviction that the symptoms mentioned in Genesis point to the celebrated removal of the rib from Adam as having been performed under chloroform.

The paper provoked a good deal of discussion. Dr. Fulton, of Kansas, was in favor of the use of chloroform. He pointed out, however, that anyone could administer ether, while it took far more skill to administer chloroform. Dr. W. H. Elliott, of Savannah, Georgia, was in favor of chloroform. Dr. John Eddy, of Olean, N.Y., was of opinion that the indications pointed to the surgical operation mentioned by Dr. Gordon having been performed by aid of hypnotism. Dr. A. I. Bouffleur, of Chicago, pointed out instances of the unreliability of chloroform. Dr. Joseph A. White, Richmond, spoke strongly in favor of cocaine. Dr. W. S. Hoy, Wellston, Ohio, suggested that the sense of the meeting be taken as to which anæsthetic should be used in selected cases, and Dr. Bouffler protested against this being done, as it would tend to commit the Association to a certain plan of treatment. After a good deal of discussion this view of the case prevailed.

Dr. F. C. Vandervoort, of Bloomington, Ill., read a paper on "Fever and the Fever State," which was a careful and technical review of the subject. He was followed by Dr. W. H. Coffey, Parkersville, Mo., with a paper on "Conservatism," in which he laid stress on the need for caution in operating. Dr. W. S. Hoy discussed the subject briefly.

EVENING SESSION.

The amphitheatre was brilliant in the evening with a crowded audience. Government House was represented by Miss Mowat, Mrs. Charles Ferguson, Miss Fraser and Commander Law. Dr. James Thorburn occupied the chair, and on the platform were the President, Dr. George Ross, Hon. George W. Ross, Mayor Shaw and Dr. Riordan.

Dr. Thorburn briefly welcomed the visitors and concluded with a word of hope for the Anglo-American alliance which was cheered to the echo.

Mayor Shaw, who was suffering from indisposition, added his welcome. He, too, alluded to the Anglo-American alliance, and assured his audience that Canadians are heart and soul in sympathy with the Americans in their present war—a remark which elicited loud cheers.

After a song by Miss Dorothy McMurtry, which was encored, Hon. George W. Ross was called upon. He expressed in most graceful terms the heartiness of the welcome which Toronto extended to the railway surgeons. He eulogized the profession which they represented and welcomed their American guests in especially warm words. They had decorated the hall in recognition of their guests, and Mr. Ross observed he had never seen so many Stars and Stripes in it as on the present occasion, had never seen the Union Jack and Stars and Stripes so closely entwined. He was glad of it. (Applause.) The Union Jack said to Old Glory, as their guests called their flag: "Let there be no strife between you and me, between my kinsmen and your kinsmen, I pray thee, for we are brothers." (Loud applause.)

After a eulogy of the achievements of the American people, Mr. Ross went on to refer to present-day conditions in the following terms:—

"We recognize the courage, resoluteness and ability with which you have entered upon this recent war for the redemption of Cuba, a war to establish civilization and humanity in an island where there was little of it before. We congratulate you upon the splendid courage of the American soldier, and that in the hour of trial he has proved that he has within him that Anglo-Saxon pluck which won at Waterloo, which has defended British honor under the hot suns of India. We recognize this spirit of Anglo-Saxon alliance—an alliance, not for political purposes, but for

humanity's sake, for the sake of civilization, for preventing the development of tyranny and despotism, for the sake of lifting up poor, weak, human nature to a higher plane of usefulness and enjoyment. Such an alliance is now under consideration, an alliance to protect the weak against the strong, to have this world better than it was before. Long may the Stars and Stripes proclaim to the world that freeborn citizens are capable of evolving institutions, which intensify and strengthen the bonds of freedom. Long may our old Union Jack proclaim to the nations of the world likewise that its purpose is to strengthen the bonds of freedom and preserve peace as far as possible among the nations of the world. These two flags thus floating with this purpose in view will deepen the power of our common interests, will widen the bonds of freedom, strengthen the privileges of civilization, and hasten the day "when the war-drum throbs no longer and the battle flag is furled on the parliament of man, in the federation of the world." (Loud and prolonged cheers.)

Dr. Ross, the President of the Association, thanked the gentlemen who had spoken, speaking in warm terms of the heartiness of the welcome extended to them and to the eloquence of Hon. Mr. Ross.

A musical entertainment followed, songs being given by Capt. Alex. Boyd and Mr. Laurie Boyd, by Miss Hodgett, by Miss McMurtry and by Mr. Harold Crane. A promenade followed, the band of the Queen's Own Rifles furnishing the music.

SECOND DAY.

The Association, at its second day's session, proved themselves a business-like body. The papers were all of a practical and technical nature, and the members discussed every paper presented with zest and determination. The greater part of the day was taken up with a series of papers and an elaborate discussion of shock. The universal interest taken by all showed how constant a phenomenon it is in practice. The papers were all technical, and the members pushed their sessions to the full limit in the morning, keeping at work till noon, and in the afternoon working right up to six o'clock. They made such good progress that they were able to allow themselves a rest in the evening.

The morning's session concluded the business of the Association and excursions filled up the afternoon and evening, the excursion to Muskoka taking place on Saturday.

The next place of meeting is not as yet decided, but is left in the hands of a committee.

The first paper read in the morning was on "The Nature and Pathology of Shock," by Dr. F. J. Lutz, of St. Louis, Mo. He pictured the appalling symptoms presented by the subject of his paper, symptoms which overshadow for the moment the crushed

limb or the excoriated flesh, and went on to group the hypotheses advanced in explanation, according as the heart and blood vessels or the central nervous system are made responsible for the condition. Of the various theories put forward he regarded Leyden's as perhaps the most satisfactory, this being that shock is a "reflex inhibition" of the functions of the spinal cord, violent peripheral irritation, producing such molecular changes in the central nervous substance that it cannot for the time being respond to less intense irritations. Groeninger's investigations he considered as enlarging this theory to a remarkably conclusive degree. "If," Dr. Lutz said, "we were to present the definition of Groeninger and explain shock as fatigue or exhaustion of the spinal cord and medulla oblongata, brought about by sudden violent irritation, and classify it among the 'functional disturbances,' it might be considered as explanatory of the functional disturbances, but it is not descriptive of all the physical changes connected with these disturbances. For the present this is, however, all we can do."

Dr. Wyatt Johnston, of Montreal, followed with a very interesting technical paper on "The Pathology of Railway Shock." It was an indication of a line of research which is now opening up. In the last two or three years a number of pathological changes in the nerve system have been detected in allied cases, as, for instance, cases of poisoning epilepsy, etc., which are analogous to the symptoms observed in injuries to nerve cells. This circumstance would appear to point to anatomical changes, which hitherto have been supposed to accompany shock.

Dr. H. L. Getz, of Marshalltown, Iowa, followed with "The Varieties and Causes of Shock." He gave the ordinary classification of shock as reflected, mental and direct, the first resulting from injuries to portions of the body not involving the brain, the second the result of imagination, fear or grief, and the third caused by direct injury to the brain. This classification Dr. Getz changed so as to divide shock into functional, the result of neglected impression upon the neuron and so temporarily arrested nerve current, and organic, where actual injury is done to neuron cells. Such a classification, he thought, would conduce to an intelligent treatment of the subject.

Dr. James H. Letcher, Henderson, Ky., followed with a paper on "The Prevention and Treatment of Shock." Dr. S. R. Miller, Knoxville, Tenn., followed with a paper on "Is the symptomatology of shock to the liver different from that of other injuries of the same gravity?" The question was answered by him in the affirmative. Dr. J. G. Tuten, of Jessup, Ga., related an interesting case in which shock seemed to have been a predisposing cause for the development of consumption.

In the afternoon session the papers on shock were discussed. The first speaker was Dr. W. B. Outten, of St. Louis, Chief Surgeon of the Missouri Pacific. He could, he said, distinguish no difference between a profound shock and a profound hæmorrhage—they came

to the same thing. In dealing with operations under chloroform he put in a strong plea for a gentle and reassuring manner of dealing with patients.

Sir William Hingston, of Montreal, was the next speaker. He held that hæmorrhage had nothing to do with shock; that, he said, had been demonstrated. He mentioned what he described as the three common-sense remedies, rest, quiet and encouragement, all of which were of vast moment. He illustrated this by telling an amusing incident in his own practice.

Dr. Hugh M. Taylor, of Richmond, Va., gave his paper on "The Prevention of Shock," which he had been prevented from giving in the morning. Even when shock could not be prevented, he said, much could be done in mitigation of its three consequences, pain, hæmorrhage and sepsis.

Dr. C. J. McOscar, Fort Wayne, Ind., made the point that shock was the result of violence, of the nerves being "Deweyized." It did not mean hæmorrhage, he contended. To charge the collapse resulting from hæmorrhage to shock was to connect two things which were no more connected than "we and Spain."

Dr. Fulton, of Kansas, criticised the use of alcohol in cases of shock, holding that it is of no use. He referred to Dr. Tuten's case as a predisposing cause of consumption; he could see no connection between the two, he said. Dr. Jay, of Chicago, distinguished between shock and collapse and hysteria.

Dr. W. F. Trigg, of Cumberland, Md., was opposed to the introduction of medicine into the system. The discussion continued at length, among those speaking being Dr. G. P. Conn, of Concord, N. H.; Dr. E. T. Lutz, of St. Louis, Mo.; Dr. Girdlewood, of Montreal; Dr. J. H. Eddy, of Olean, N.Y.; Dr. H. L. Getz, of Marshalltown, Iowa; Dr. James H. Letcher, of Henderson, Ky.; Dr. J. Budd, of Two Harbors, Minn.; and Dr. T. McCulloch, of Chatsworth, Ont. Finally, at 4.35 o'clock, a motion to drop the discussion was carried. The value in which the discussion was held was shown by the Association deciding to publish the papers and symposium in one issue of *The Railway Surgeon*, the organ of the Association.

Dr. A. I. Bouffleur, of Chicago, then read a paper on "Cerebral Contusions." He discussed the various causes of injuries to the brain, and gave a number of interesting instances from his own practice. The conclusions which he deduced from his experience were: (1) The term "cerebral concussion," as generally employed, is indefinite, unsatisfactory and inconsistent with modern ideas of pathology and precision. (2) The term should be limited to those phenomena resulting from the disturbance of the function of the brain by trauma, without the production of gross mechanical lesions of the brain. (3) The slightest manifestation of concussion is due to disturbance of the fluid equilibrium of the brain and is always of momentary duration and effect. (4) More severe concussion produces a spasm of the vasomotor system and results in the production of signs and symptoms which are identical with and undis-

tinguishable from shock, and which persist until the circulatory equilibrium is restored and not thereafter. (5) The gross mechanical lesions of the brain produced by trauma, with or without fracture of the skull, are identical with those of contusion elsewhere. (6) The clinical history corresponds with what should naturally be expected from a contusion of tissues of such delicate structure and of such specialized function with such anatomic relations. (7) The treatment of contusion of the brain is the same as that of contusion elsewhere, with the special demand for the early treatment of complications. (8) The term "cerebral compression" indicates a mechanical disturbance of the circulation of the brain by any lesion which materially increases intercranial tension.

The paper was discussed by Drs. Getz, Outten and Elliott, all agreeing in the condemnation of the term "concussion."

The last paper of the day was on "Surgery of Severed Tendons in Infected Regions," by Dr. Francis B. Fite, of Muskogee, Indian Territory. It was discussed with interest, the discussion being concluded by Dr. Bouffleur.

The Association then adjourned till nine o'clock next morning.

THIRD DAY.

The Association brought the business portion of their meeting to a close on Friday, the 8th, and the finale was as pleasant as the whole course of the gathering. Unusually cordial international good feeling was the dominant note of the convention, and it came to a head when Dr. Bruce L. Riordan, of Toronto, surgeon of of the G.T.R., was chosen President. Dr. Riordan merited his promotion by the unflinching and singularly effective work which he had done as Chairman of the local Committee of Arrangements. He had striven with his might, and the result of his labors is that not a day passed without several expressions, not only of appreciation, but of surprise at the perfection of the arrangements coming from the floor of the house, while individually the members of the Association were high in their words of praise for the cordiality and completeness of their welcome. It is safe to say that the visitors went away with a keen appreciation of Canadian hospitality which the trip to Muskoka certainly clinched. Dr. Riordan's election was not uncontested, Dr. A. I. Bouffleur, of Chicago, being his opponent. Dr. Bouffleur is one of the most eminent members of the Association, and the grace with which he accepted his defeat was in keeping with the excellent spirit which he had shown all through the meeting, a spirit which explained his popularity.

Business came first when the meeting assembled at nine o'clock. The first paper read that day was "The Pelvic Brain in Diseases of the Pelvic Organs," by Dr. A. L. Fulton, Kansas City, Mo., an interesting disquisition upon an important point.

Dr. C. F. Leslie, of Clyde, Kansas, read a paper which was a

report of a case of lightning stroke, with accompanying fracture of base of skull. The case was one which Dr. Leslie described as being, as far as he knew, unique. The man was a brakeman, and was knocked off his car by a flash of lightning. The train was running at full speed, and in his fall he sustained a fracture of the base of the skull. A handkerchief which he wore about his neck was cut in two, his watch and chain were melted and his flesh was lacerated. Notwithstanding the extraordinary complication of injuries he made a fairly speedy recovery, and is now on the road.

Choosing a President.

Then the way was cleared for the election of officers. The rule of the Association is that the President, Secretary and Treasurer

DR. RIORDAN, OF TORONTO.
President.

DR. ROSS, OF RICHMOND, VA.,
Retiring President.

are elected in open meeting, the remaining officers being nominated by the Nominating Committee.

Dr. F. J. Lutz, of St. Louis, Mo., moved that Dr. Riordan, of Toronto, be the new President. He did so in a graceful speech, which was liberally punctuated with applause. He spoke in warm terms of the splendid manner in which Toronto has treated her visitors, and added, amid cheers, that the Association should in this way show its appreciation of the way in which Dr. Riordan's country had come to the aid of their country and had held back the rest of the world when it was seeking to tie their hands.

Dr. Fulton, of Kansas City, Mo., seconded the nomination.

Dr. W. B. Outten, of St. Louis, made an extended speech in which he fully acknowledged the glorious reception given to them

MUSKOKA

Rock and River.

Port Carling, Muskoka.

A Fish Story.

A Beauty Spot.

by Toronto. However, he thought that the interests of the Association would be better served by the election of Dr. A. I. Bouffleur, of Chicago, whom he accordingly nominated.

Dr. C. J. McOscar seconded this nomination.

Dr. Fulton raised a question of privilege, noting the grudging manner in which the Association had been treated by the railroads in the matter of transportation, and observing that the one exception had been the Grand Trunk; that road had treated them splendidly.

Dr. W. S. Hoy, of Wellston, Ohio, drew attention to the feeling of international unity which has marked the meeting. "I must turn my face to the Union Jack," he declared, and he added a warm word of praise for the entertainment accorded them. He was for Dr. Riordan.

The discussion continued for awhile. Dr. J. R. Taylor, of Texas, Dr. M. Jay, of Chicago, Dr. Eddy, of New York, and Dr. Lester Keller, of Ironton, Ohio, taking part. The latter gentleman, referring to praise of Dr. Bouffler's ability, said that "there are others." Dr. Riordan, he said, had shown executive ability second to none. If there was anything else in Toronto which he had not got for them the speaker wanted to know what it was.

The vote was then taken, and resulted in 135 for Dr. Riordan and 82 for Dr. Bouffleur. Dr. Bouffleur moved that it be made unanimous, and, amid cheers, this was carried. Dr. Riordan was escorted to the platform and introduced to the meeting in a very graceful manner by Dr. Bouffleur. He was heartily greeted and spoke briefly, thanking his hearers for their kindness and saying that he took it as a compliment to his country and to his city.

Secretary and Treasurer.

Dr. E. R. Lewis, of Kansas City, Mo., was unanimously re-elected Treasurer, and Dr. L. J. Mitchell, of Chicago, was, also unanimously, re-elected Secretary. Both these officials have shown great efficiency and executive ability in the discharge of their duty.

A very complimentary vote of thanks was passed, in which the Local Committee, Dr. Riordan being mentioned by name, the city authorities, the railway and navigation companies with which they have come into contact, especially the Grand Trunk, the press and the citizens generally, were mentioned. "May we express the hope," it said, "that this International Association may be the means of binding not only the profession, but the people of the Dominion of Canada and the United States in closer bonds of friendship, good-will and brotherly love."

The Nominating Committee.

The Nominating Committee then brought forward its report, which proposed the following names:

Vice-Presidents—Surgeons R. E. L. Kincaid, Texas; James G.

Hunt, Utica, N.Y.; James L. Foxam, Huron, South Dakota; W. Gunn, Clinton, Ont.; A. H. McKnight, Hartford, Conn.; C. F. Leslie, Clyde, Kansas; Hugh M. Taylor, Richmond, Va.

For the Executive Board—Surgeons F. J. Lutz, St. Louis, Mo.; James Alexander Hutchison, Montreal, Que.; H. L. Getz, Marshalltown, Iowa.

As honorary members—E. H. John, Vice-president and General Manager, Seaboard Air Line, Portsmouth, Va.; V. E. McBee, General Superintendent, Portsmouth, Va.; B. B. Osler, Q.C., Toronto, Ont.; Edgar J. Rich, counsel Boston & Maine Railroad, Boston, Mass.; L. S. Thorne, General Manager, Texas Pacific.

Swept by Ocean Breezes—Old Point Comfort, Va.

The names of Sir William Van Horne and of Hon. L. M. Martin and Frank L. Gannon, General Manager of the Southern Railway, were added in open meeting.

The Nominating Committee suggested that Richmond, Va., be the next place of meeting. It was also suggested that either White Sulphur Springs, a point on the Chesapeake & Ohio; and again, that old Point Comfort, Fortress Munroe, Va., be the place, but the matter was left to the Executive Committee.

Each of these places have their advantages, no doubt, but remembering the hospitality shown to the Association when it met

A Glimpse of Muskoka.

Some of the many Islands passed, July 9th, 1898.

last time at Old Point Comfort, Va., we think that that alone should induce this renowned old spot to be at once chosen for the 1899 meeting. What could be more conducive to health than a week or ten days at Fort Munroe, lying as it does right on the sea shore, with the balmiest and most refreshing air blowing in at your bedroom window in that hostelry of hostelries, Hotel Chamberlin, with its sumptuous furnishings, given to the guest at rates so low as to be surprising, considering the service rendered. Committee, we blend our voices with the multitude of others and say, "Choose Old Point Comfort for 1899."

The concluding proceedings were next in order. A vote of thanks was passed to the retiring President, and Dr. Riordan gracefully made the result known to Dr. Ross. Then three cheers

Decorated Grand Trunk Engine, July 9th, 1898.

were given for Toronto, one western man's "hallelujah" rising high above the roar, and the Association stood adjourned.

After the Work the Fun.

In the afternoon began the day and a half of enjoyment with which the surgeons proposed to recompense themselves for the steady attention which they had paid to business. The city contributed to the afternoon's entertainment, which took the form of a trip on Lake Ontario on the steamer *White Star*. The steamer left the Bay Street wharf shortly after two o'clock with a heavy load, and steamed westwards as far as Long Branch. It then went east as far as the eastern gap, and then came along the bay to Exhibition Park. There the party disembarked and proceeded to the park where a civic "high tea" was tendered them in a large marquee. The band of the Royal Grenadiers was in attendance,

and played splendidly. In all about 800 people were present at this entertainment. High tea over, and the photographer having worked his will upon the crowd, the street cars provided as the Street Railway's contribution to the entertainment—thanks to Dr. A. Jukes Johnson—made their appearance. The visitors were conveyed in them down to Munro Park and then around the belt line. All were delighted with their trip.

On Saturday took place the Muskoka excursion. The party left Toronto Union Station at 7.30 a.m. sharp, on board one of the handsomest vestibuled trains that ever pulled out of the Union Station. It was in charge of the Local Passenger Agent, Mr. M. C. Dickson, who was untiring in his efforts to see after the comforts of everybody. The train was decorated with both American and English flags, and it was positively amusing to see the graingers in the open fields drop work and stare at the train as it flew past. We reproduce here, in half-tone, a photo taken of the engine that day with its many decorations, and for the sake of those of our readers who were not fortunate enough to be present at the excursion we give them some snap shots at Muskoka. Arriving at Muskoka Wharf, the excursionists embarked at once on the steamer waiting, and proceeded up Muskoka Lake to Port Sandfield, where lunch was served. After lunch the party returned by the same route past the Sanatorium to Muskoka Wharf, where light refreshments were provided, after which the special train was in waiting to convey the excursionists back to Toronto, arriving there at 10 p.m.

The Committee of Arrangements publicly expressed their thanks to Hon. A. S. Hardy and members of the Cabinet of the Ontario Government for a generous grant toward entertaining the members and their friends on this excursion, also to Mr. Charles M. Hays, General Manager Grand Trunk Railway System, for railway transportation, and to Mr. A. P. Cockburn, Secretary and General Manager Muskoka and Georgian Bay Navigation Company, for transportation by steamer to the Muskoka lakes.

The local Committee of Arrangements consisted of the following gentlemen: Drs. T. G. Roddick, M.P., Montreal; Sir. W. Hingston, Montreal; J. Alex. Hutchison, Montreal; J. Bray, Chatham; A. McKay, Ingersoll; L. B. Powers, Port Hope; J. Coventry, Windsor; J. Gunn, Clinton; D. M. Fraser, Stratford; A. Taylor, Goderich; J. Thorburn, C. O'Reilly, J. E. Graham, Adam Lynd, A. J. Johnson, J. F. W. Ross, W. Oldright, R. B. Nevitt, George Peters, A. H. Wright, J. Noble, Toronto; Louis J. Mitchell, Chicago, Ill.; T. McKenzie, C. A. Temple, G. H. Burnham, R. A. Pyne, P. H. Bryce, Chas. Sheard, J. J. Cassidy, H. A. Bruce, H. T. Machell, J. Gilmour, W. F. Gallow, W. H. Pepler, J. Dwyer, A. A. MacDonald, W. A. Young, J. D. Thorburn, H. H. Oldright, Ald. Bowman, Dunn and Richardson, Toronto; H. A. Bruce, Secretary; R A. Pyne, Treasurer; Bruce L. Riordan, Chairman Committee of Arrangements.

MEDICAL COUNCIL OF THE COLLEGE OF PHYSICIANS AND SURGEONS—33rd ANNUAL MEETING.

THE Medical Council of the College of Physicians and Surgeons of Ontario assembled for its thirty-third annual meeting at two o'clock in the afternoon of July 5th, in the Medical Council building, corner of Bay and Richmond streets. Dr. J. Thorburn, of Toronto, the retiring President, called the meeting to order, and the following members were present:—Dr. Armour, Dr. Barrick, Dr. Bray, Dr. Britton, Dr. Brock, Dr. Campbell, Dr, Dickson, Dr. Douglas, Dr. Emory, Dr. Fowler, Dr. Geikie, Dr. Griffin, Dr. Henderson, Dr. Henry, Dr. Logan, Dr. Luton, Dr. Moore, Dr. Moorehouse, Dr. McCrimmon, Dr. McLaughlin, Dr. Rogers, Dr. Roome, Dr. Sangster, Dr. Spence, Dr. Taylor, Dr. Thorburn, Dr. Thornton, and Dr. Williams.

Only one session was held that day, the balance of the time being occupied in getting the various committees to work.

Immediately after the roll-call, the election of officers took place, resulting as follows:—President, Dr. Luton, St. Thomas; Vice-President, Dr. W. F. Roome, London; Registrar, Dr. R. A. Pyne, Toronto; Treasurer, Dr. H. Wilberforce Aikins, Toronto; Solicitor, Mr. B. B. Osler, Q.C., Toronto; Stenographer, Mr. Alex. Downey, C.S.R., Toronto.

DR. THORBURN'S ADDRESS.

Dr. Thorburn, the retiring President, then delivered his address, thanking the members for the honor they had conferred upon him in electing him President of the Council, which he termed the Legislature of the Profession, and asserting that he had every reason to believe that so long as they conducted themselves worthily they would be sustained by the profession. He spoke of the many changes that had occurred in the membership during the year, making special refenence to the death of Doctors Burns and Shaw.

Referring to the examinations, Dr. Thorburn said that he was pleased to be able to state that they had been thoroughly and efficiently conducted. He suggested, however, that a more suitable allotment of work for each examiner be made, in order that the work of the board could be more equitably distributed.

The matter of prosecuting illegal practitioners, he said, had been carried on as vigorously as possible. He had noticed in connection with this that numerous complaints had come from members of the college regarding fifth-year students, who had gone to country places to practise with the view to putting in the year of practical work demanded by the curriculum. The difficulties arising out of the existing regulations he thought would become a serious question, and called for immediate attention.

After referring to the prominence that the subject of interpro-

vincial registration had taken recently, Dr. Thorburn closed his address by introducing Dr. Luton, the president-elect.

Resolutions of sympathy were passed to the families of the late Dr. Shaw, of Hamilton, and Dr. J. H. Burns, of Toronto, who died during the year. Both gentlemen were members of the council at the time they died, Dr. Burns having just been elected on the day of his death.

The following standing committees were appointed:—Registration Committee, Drs: Fowler, Campbell, Hanly, McLaughlin, Griffin, Taylor, McCrimmon; Rules and Regulations Committee, Drs. Hanly, Armour, Spence, Henry, Barrick; Printing Committee, Drs. Barrick, Taylor, Emory, Spence, McLaughlin; Education Committee, Drs. Britton, Bray, Emory, Dickson, Moore, Moorehouse, Rogers, Sangster, Williams; Property Committee, Drs. Campbell, Dickson, Thorburn, Williams, Thornton; Complaint Committee, Drs. Geikie, Fowler, Logan, Thorburn, Douglas.

Breaches of the Act.

The Council went into a Committee of the Whole for the consideration of the report of the Special Committee on Prosecutions, the first clause of which stated that four meetings had been held and complaints had been submitted at each meeting. The second clause announced that a number of anonymous communications, complaining of breaches of the Medical Act, had been received, but they were not acted upon. Occasion was taken to inform members of the profession that all communications relating to such charges were treated confidentially.

Considerable discussion resulted from the third clause, which was to the effect that on investigation a large number of the offenders were found to be fifth year medical students. In some instances they were practising several miles away from established practitioners, although professing to be their students. Quite frequently they were found to be pursuing their profession utterly regardless of the law. Several members of the Council thought that they should not be too severe on such offenders, claiming that they could not gain admittance to the hospitals. Others contended that they could pursue hospital work if they were willing to pay for it, and thought if any leniency was exhibited toward them the object for which the fifth year was on the curriculum (practical experience before entering on active practice) was lost. The clause was finally referred to the Educational Committee. The last clause, recommending the reappointment of the committee, was carried, and the meeting was adjourned to meet again next morning, after endorsing the report as amended.

Dominion Registration.

Dr. Armour, of St. Catharines, gave notice that he would move the following resolution at this morning's session:—"That this

Council hereby places on record its willingness to co-operate with the medical organizations of the several Provinces and Territories to establish an office of Dominion medical registration, whereby provincial practitioners may secure the right to practise their calling in all parts of Canada on the following basis: The several Provinces shall require a course of professional study of not less than four years with sessions of eight months each, and shall have a central examining board before whom all students and applicants must pass before receiving provincial registration, when all provincial licentiates of five years' standing shall be entitled to Dominion registration."

Finances and Estimates.

The financial statement was presented showing the receipts of the year to have been $51,622.30, including a balance of $790.83 carried over from last year. The expenditures amounted to $50,782.49, leaving a balance on hand of $839.81. The estimates for next year were submitted, amounting to $19,485.29.

An invitation was received from the International Association of Railway Surgeons asking the Council to accompany them to Muskoka on Saturday, and in return the Council extended an invitation to any members of that body to visit them when they found it convenient.

SECOND DAY.

The principal matter which came before the Council of the Ontario College of Physicians and Surgeons at Wednesday's session was a resolution moved by Dr. Armour pledging the Council to sympathy and co-operation with the medical organizations of the other Provinces to establish an office of Dominion medical registration. It is a matter which has been before the medical profession for a number of years, and the majority of the Council are apparently in strong sympathy with the intention of the resolution.

The Council reassembled at ten o'clock with the President, Dr. Luton, in the chair, and all the members present.

Dr. Sangster gave notice that at a subsequent meeting he would move, "That in the opinion of this Council all the institutions which have ceased to exist or which merely hold their charters in abeyance, no longer either teaching medicine or granting degrees therein, are not entitled to continued representation in this body."

The Registrar read a communication from Mr. C. W. Walter asking the Council to reconsider his examination held at the last test for licentiates.

Dominion Registration.

The following resolution, notice of which had been given the day before, was then moved by Dr. Armour and seconded by Dr. McLaughlin: "That this Council hereby places on record its willingness to co-operate with the medical organizations of the

several Provinces to establish an office of Dominion medical registration, whereby provincial practitioners may secure the right to pursue their calling in all parts of Canada, on the following basis: The several Provinces shall require a course of professional study of not less than four years, with sessions of eight months each, and shall have a central examining board before whom all students and applicants must pass before receiving provincial registration, when all provincial licentiates of five years' standing shall be entitled to Dominion registration."

In support of his resolution Dr. Armour said: With the fifteen minutes at my disposal I will only have time to refer briefly to some of the leading features of this important question It is a question that not only the members of this Council and medical men of Ontario but the profession of the Dominion are mutually interested in and desirous of solving. Wherever and whenever the subject has been discussed, before medical societies or in medical journals, there has been, so far as I know, a unanimity of opinion in favor of interprovincial or Dominion medical registration. Any differences that existed have been as to the best method of adjusting the conflicting interests that lie in the way of this desirable object. Had the fathers of Confederation made provision for Dominion medical registration we would not have the present difficulty to contend with, but unfortunately in this respect educational matters were left solely with the Provinces, and interests have grown up that make it difficult to arrive at a national uniformity, and when arrived at to apply the means to utilize it.

Vexatious Disabilities.

That a medical practitioner competent to practise his profession in one Province of our fair Dominion should be ineligible to exercise his calling in all is a reflection on the co-operative unity that should characterize a progressive and liberal profession. It is not likely that many practitioners would care to change from one Province to another, but should they desire to remove to any part of the Dominion on account of their health or for other reasons, as a citizen of this free country they should have the privilege of doing so. To those practising near the boundaries of the several Provinces, interprovincial prohibition is very vexatious. That a medical man passing a provincial boundary in the pursuit of his calling should become liable to a fine or imprisonment is a disability calling loudly for redress. Perhaps in no other country are these restrictions so exacting as they are between our Provinces. Great Britain, Ireland and all her autonomous colonies have arrangements for reciprocal medical registration. Such hostile countries as France and Germany have an international arrangement for reciprocal privileges of this kind for fifteen miles on each side of the boundary line of these countries. These are examples by which the medical profession of Canada might profit.

When international interests can be made to yield to this necessity, surelty it is possible to adjust interprovincial to the same purpose.

The ideal form of Dominion registration would be to establish a common standard of preliminary and professional education and have all pass a uniform examination, but while the several Provinces have different systems of education it would be with great difficulty that even a uniform standard of matriculation could be adjusted. If an absolute Dominion registration was granted on a basis of different provincial standards, it would be putting at a premium the lower standards, and the Province that had the lower standard would have the bulk of the students to educate. A five years' provincial probation, as provided for in the resolution, would in a great measure obviate this. It would also give time for compensating from practical inexperience for some of the disabilities connected with the inequalities of the preliminary and professional educational standards. The five years' stipulation would only temporarily deprive about ten per cent. of the provincial profession of Dominion registration, while the other ninety per cent. would have all the privileges connected therewith.

Central Examining Board.

All the Provinces have central examination boards, but it is not obligatory that all students or outside graduates pass the examination of the board, except in Ontario and Manitoba and British Columbia, with some insignificant exceptions. The advantages to be gained from Dominion registration should make it easy to have the several Provinces make it obligatory that all desiring registration should pass the central examination board. All the Provinces except British Columbia require a four years' course of medical study before being admitted to examination for license to practise, and there should not be any difficulty in getting British Columbia to raise her standard to a four year course. Ontario alone requires a five year course. In my opinion the public and professional interests require that this be maintained, and it is to be hoped that in the near future the other Provinces will raise their standard to a five year course. The five year provincial probation would, in some measure, protect the medical interests of Ontario from being seriously affected by this inequality of curriculum. There would probably be little difficulty in securing a uniform standard of four sessions of eight months each. There are none of the Provinces in which this requirement at present exist, except in Ontario. McGill University requires, I believe, four sessions of nine months each, but the Province of Quebec only requires four sessions of six months, and the remaining Provinces three sessions of six months each. The Medical Councils of Quebec, Prince Edward Island, Nova Scotia, New Brunswick and Manitoba have already signified by resolution their approval of an eight months' session, with a view of reciprocity. British Columbia and the Territories would have to

comply. If anything is to be accomplished in this line, Ontario, that has the highest standard, must be prepared to meet the other Provinces in a liberal and a generous spirit. While I do not approve of lowering our standard, the conditions of the resolution, if they should be carried out, would have the effect of considerably increasing the standards of the other Provinces, leaving Ontario free to maintain hers as at present.

The establishment of Dominion medical registration would entitle us to the privilege of reciprocal registration with Great Britain, giving Canadian practitioners all the advantages connected therewith. I trust the resolution will receive the careful consideration of the members, some of whom, notably Drs. Thorburn, Bray, Moore and Thornton, have therefore shown a deep interest in the question, and that it may, after careful consideration, receive the approval of the Council.

Dr. Logan proposed that the resolution be sent to the Educational Committee, with instructions to that body to bring in a report on the matter which would then come up for general discussion.

The proposal to send it to this committee brought on a discussion in which all who spoke touched on the general question of Dominion registration. Great unanimity of opinion was expressed as to the urgency of such a measure. There was a difference of opinion, however, as to the committee to which the matter should be referred.

A number of members were favorable to sending it to a special committee, some of them contending that the Educational Committee was already overworked. Dr. Geikie opposed its being sent to the Educational Committee on the ground that this committee had not upon it a sufficient representation of medical college professors.

Dr. McLaughlin, of Bowmanville, very strongly objected to the schools having too big a finger in the pie.

A suggestion from Dr. Rogers that the question be taken up in committee of the whole Council did not receive support, and finally when Dr. Brock withdrew his motion to send the matter to the Educational Committee, a resolution, moved by Dr. Douglas, that that question be sent to a special committee of the following was adopted: Drs. Fowler, Britton, Logan, Moorehouse, Geikie, Rogers, Williams, McLaughlin, Moore and Armour.

To the same committee was referred a resolution similar to that of Dr. Armour, notice of which had been given by Dr. Britton.

On motion of Dr. Bray, the report of the Discipline Committee was made the first order for this morning.

Protest from Dr. Geikie.

The following protest submitted by Dr. Geikie, Dean of Trinity College, was discussed and finally fyled:

"Dr. Geikie, on behalf of the faculty of Trinity Medical College, begs to enter his emphatic protest against the exclusion from the Education Committee of the representatives of this College and of some of the other large medical teaching bodies of Ontario, as a wrong to the colleges in question, as well as unjust to the interests of medical education in the Province, and calculated to do great injury to the Council in the opinion of large numbers of the more thoughtful members of the profession throughout Ontario."

AFTERNOON SESSION.

When the Council resumed business after lunch a number of notices of motion, which will come up as resolutions in the regular course of business, were submitted.

A communication was received and read from a number of medical practitioners of Halton and adjoining counties, praying that the name of Dr. S. A. Carter, of Halton, whose name was stricken from the roll, might be restored to it. Dr. Carter was convicted of the felony of malpractice and imprisoned, and his name eliminated from the list of medical practitioners. The petition states that no ill resulted from the attempt of which he was found guilty; that he himself maintained and still maintains his innocency of any intention of committing the crime for which he was punished, and that he was always held in high estimation by the people among whom he lived. The petitioners, therefore, regard the sentence of the Council as severe, and ask that his name be re-entered on the roll of the Medical Council.

The matter was referred to the Registration Committee to report on.

Dr. Sangster, seconded by Dr. Armour, then moved the resolution of which he had given notice in the morning, the effect of which was that certain institutions which no longer taught medicine or granted degrees should cease to be represented in the Council.

The resolution is aimed at the right to seats in the Council of Dr. Thorburn, representing the Toronto School of Medicine; Dr. Geikie, representing Trinity Medical College, Dr. Griffin, representing Victoria College, and Dr. Fowler, representing the Royal College of Physicians and Surgeons, Kingston.

No Right to Seats.

In speaking to his resolution, Dr. Sangster said that it was a matter of regret to him that he was obliged to take the invidious position of attacking, or seeming to attack, the right of any fellow-member to a seat at the Council board. He repudiated in the strongest terms any feeling of personal animus against the gentlemen whom his resolution might affect. These gentlemen were

personal friends of his own; they were an honor to the institutions they represented and ornaments to their common profession. The action was dictated solely by a sense of duty to his own constituents. The speaker then said that he would refrain from reciting the history of the introduction of appointed members to the Council, but he read the clause under which they were admitted. He then contended that at the present time Trinity Medical College and the Royal College of Physicians and Surgeons of Kingston had no separate independent existence, but that the first was simply the medical faculty of Trinity University, and the second the medical faculty of Queen's University. Therefore, he argued they had no right to representation at the Council board. Victoria, the speaker's own alma mater, had been merged in Toronto University and had, therefore, lost its separate corporate existence. Toronto School of Medicine as a corporate body was practically defunct, or its corporate existence was in abeyance. It did not grant degrees, and while it might be in affiliation with Toronto University steps had been taken some time ago to refuse it representation on the University Senate. Accordingly, Dr. Sangster continued, there were four gentlemen sitting in the Council who had no right to seats at the board. By eliminating them the Council would be doing away with a bone of contention, and would be reducing the annual payment of the College by one-sixth.

Dr. Geikie, of Trinity College, and Dr. Fowler, of Queen's, both took exception to the statement of Dr. Sangster, that the institutions they represented had no separate corporate existence, but the whole matter was finally, at the instance of Dr. Britton, left over until next day, owing to the absence of Drs. Thorburn and Griffin.

The Council then adjourned, to allow the committee time to meet and prepare their reports.

THIRD DAY.

The third day's morning and afternoon sessions of the Council were devoted to the reading and consideration of the report of the Discipline Committee. This report dealt with charges of unprofessional conduct against five accredited medical practitioners, members of the Ontario College of Physicians and Surgeons. Of the five four were struck off the roll of the College and one was allowed to remain on suspended sentence, owing to a number of mitigating circumstances in his case. Dr. Luton, President, opened the proceedings at ten o'clock.

The first case taken up was that of Dr. Albert Wm. Sovereen, of the county of Essex, to whose charge four accusations were laid. He was accused of having travelled with a quack medical combination called the Kamama, Jr., Hindoo Remedy Co.; with having prescribed their nostrums, and thereby defrauded the public, and with having employed disgraceful methods of advertising. The

committee reported the charges as having been investigated and proved.

Dr. Sovereen's Name Erased.

Dr. McLaughlin, of Bowmanville, moved, seconded by Dr. Douglas, that the Registrar be directed to erase the name of Dr. Sovereen from the register, and that " the costs of and incidental to such erasure be paid by the said A. W. Sovereen to the College of Physicians and Surgeons of Ontario forthwith, after the taxation by one of the taxing officers of the High Court of Justice for Ontario. And the Registrar is directed after such taxation to obtain the issue of such execution or exemptions as may be necessary for the collection of such costs by the said College."

In moving his resolution Dr. McLaughlin alluded to the painful duty which he was discharging taking steps to exclude from the practice of his profession any man who had qualified himself for it. It was a duty, however, which was necessary in the interests of the public. A misconception, he said, existed in the public mind in regard to this Discipline Committee of the Council. The committee had been appointed not for the purpose of protecting the members of the medical profession but of protecting the public from fraud and quackery and wrong. The duty which devolved on this Council in dealing with these cases was one which had not been sought bythe profession. It had been delegated to the Council by the Provincial Government and was exercised for the public benefit. He knew tha the was voicing the opinion and desire of the Council when he said that the members did not wish this power to remain with them.

Dr. Douglas endorsed the remarks of Dr. McLaughlin, which were strongly opposed by the members of the Council and the resolution was carried. Dr. Sovereen's name was accordingly ordered to be erased from the roll of membership.

Dr. John Kirkpatrick's Case.

Dr. John Kirkpatrick, who, after having been in various parts of the world for some years, returned some months ago to Canada in straitened circumstances, according to his own statements, was charged with having been one of the Munyon doctors. The case had been investigated by the Discipline Committee and many mitigating circumstances had been discovered. Dr. Kirkpatrick had simply diagnosed cases for the Munyon Company, and as soon as he was advised to sever his connection with it he did so, throwing himself on the mercy of the Council and asking that sentence be suspended while he continued to practice according to law. He had also given evidence in other cases where the company with which he had been temporarily connected had been concerned. Drs. Rogers and Barrick, who knew Dr. Kirkpatrick, poke in high terms of him as a student and as an honorable man, and stated that he had on returning to this country been in very

straitened circumstances financially. Dr. Britton pointed out that Dr. Kirkpatrick had, as soon as he was notified of his infringement of the law, withdrawn himself from his connection with the Munyon Company and thrown himself on the mercy of the Council.

Dr. McLaughlin moved, and Dr. McCrimmon seconded, that the name of Dr. Kirkpatrick be allowed to remain on the membership roll. The mover of the resolution made a pleasant little speech, in which he spoke of the piety of the members of the medical profession, and essayed with triumphant success a short quotation from the Lord's prayer.

The resolution was adopted, and Dr. Kirkpatrick remains a member of the College of Physicians and Surgeons.

Dr. Bessey Expelled.

Dr. W. E. Bessey, of Toronto, was present in person, and with legal counsel to combat the charges made against him. The accusations were numerous, and covered a number of years, running back to 1893. The first charge was that he had appeared under the name of Dr. Washington in 1893 at Kingston. The other charges were of advertising himself as the greatest Canadian specialist, and of having committed other offences.

In speaking to the accusations, Dr. Bessey admitted unprofessional conduct in two instances under circumstances which did not make them deserving of punishment. He threw himself on the mercy of the court, and asked for a suspension of sentence.

Mr. Falls, his counsel, also pleaded for him.

His name, however, was ordered to be expunged on motion of Dr. Douglas.

AFTERNOON SESSION.

When the Council reassembled in the afternoon the report of the Discipline Committee was again taken up and the charges against Dr. Richard Allen Clark and Dr. George B. Gray, of Elora, members of the College of Physicians and Surgeons, who were accused with being "eminent doctors" of the Munyon Co. were gone into. The complaints are that these doctors associated themselves with and were parties to the sale and dissemination and advertisement of quack remedies, and that they acted as consulting physicians at the place where such remedies were administered and sold. Mr. Wm. Lount, Q.C., appeared for Dr. Clark and Dr. Gray, and Mr. J. W. Curry spoke for the Council. The Council then took up the charges seriatim in Committee of the Whole and adopted the reports, the Council subsequently concurring in the action of the committee.

A discussion took place on the resolutions to erase the names of Dr. Clark and Dr. Gray from the membership roll, and all who

spoke condemned, with the approval of the entire Council, the conduct of the accused doctors. The methods which they had adopted while attached to this company, Dr. McLaughlin said, were such as no medical man with respect for himself would countenance. Dr. Bray, chairman of the Discipline Committee, referred to the charge made that the meetings of this committee had been held in secret. This he denied most emphatically, and in doing so he was corroborated by other members of the committee. He said that the meetings of the committee had always been public, and at the investigation into these last cases newspaper reporters had been present but had gone away very soon—for what reason he could not say. Dr. Sangster said it was as well to have this specifically stated, so that the public might know it, as the members of the Council had known it all along.

The methods of putting up the company's remedies were then discussed, and Dr. Britton said that judging from the "Guide to Health," the book from which the doctors connected with the institution obtained their directions, much stronger charges might have been made against the accused men, whose revenues came from such peculiar artifices. Dr. Sangster, in his remarks, spoke of the respect he had for the press, but complained bitterly that articles prepared by some of the company's employees, puffing his remedies, were published in some of the provincial papers as editorials ostensibly written by the editors. Some of the members stated that they understood that prices ranging from $15 to $25 for the insertion of such articles had been offered. He was glad the Toronto dailies were free from this taint. Resolutions were then passed instructing the Registrar to erase the names of both Dr. Clark and Dr. Gray from the membership roll of the College.

At the session in the evening a by-law was passed altering the date for the nomination of territorial representatives from October 9 to November 8, and the date of election from October 16 to November 15.

FOURTH DAY.

The Council occupied the fourth day with two questions which were pretty thoroughly threshed out and then dropped, the discussion resulting in nothing but the public expression of the individual members

The first question was raised by a resolution moved by Dr. Spence, that a committee, composed of Drs. Barwick, Emory, Henry, Sangster, Geikie, Thornton and Spence, be appointed to deal with the abuse of hospital privileges and lodge practice. It was contended that these two sources were a means of cutting into the practice of the individual physician.

Drs. Thorburn, Rogers and others maintained that the Council as a legislative body had no power whatever to deal with these matters.

Starving the Profession.

Dr. Sangster took a different view, and in supporting the resolution said that if the Council was to be of any use at all it was to be so in looking after the material interests of the profession. He claimed that through the cutting into the physicians' business of the druggists, the patent medicine companies, the lodge practice system and the free treatment of patients at hospitals, the doctors of the Province were in a starved or semi-starved condition. Medical men were being reduced by these means to a condition where they could not live honorably, and had to adopt methods which they themselves confessed were not honorable.

Dr. Moore indignantly took exception to Dr. Sangster's statement. He disliked to see it go forth from the Council that the profession was so poverty-stricken that they had to resort to means which they themselves confessed were not honorable. This was not so, at least in the eastern portion of the Province, and he was sorry to think that it should be said to be so of any part of the Province.

After some further discussion, the President ruled the resolution out of order. Dr. Spence appealed against the ruling, but the President was sustained by a vote of 20 to 6.

Dr. Dickson introduced a by-law for the appointment of the Discipline Committee, which was filled in with the names of Drs. J. L. Bray, Campbell and V. H. Moore. Dr. Sangster took exception to the appointment of Dr. Moore, because he was a representative of an educational institution.

Raising the Standard.

Dr. Rogers, of Ottawa, introduced a motion to raise the standard of medical matriculation. The gist of his motion was that after four years, namely in 1902, the degree of B.A. be adopted by the Council as the standard for medical matriculation. He thought this four years' notice would be sufficient. He desired the standard raised, not to exclude men from the profession, but to increase the culture and education of the members of the profession. This, he said, would be beneficial to the people at large; it would force law and divinity to adopt a similar standard; the young men strive to reach a better standard and the people would become better educated. The effect on the medical profession would, he asserted, be most beneficial. Physicians as a rule would grasp the science of medicine more comprehensively. It would largely do away, too, with the cutting off of names from the roll, as men would have a higher ideal, and would be less inclined to be unprofessional. At present the average doctor was not better educated generally than a merchant clerk.

Dr. Barwick opposed the motion on the ground that it was a question the incoming Council should deal with.

Dr. Dickson seconded the motion and spoke in its favor.

Dr. Britton opposed it warmly, and urged that had this standard been in existence when he was a student, neither he nor many of the Council would now be in the profession. It would have excluded all but those able to afford a University education.

Dr. Moore argued that the motion would render the inter-provincial registration movement impossible. He wanted higher education, but not such exclusion as this.

Dr. Bray opposed it on the same ground, and pointed out that the Ontario standard was higher now than most, and such action would place it away above all other countries.

Many Objections Raised

Dr. Geikie jested with Dr. Rogers over the motion. It was too modest. Why had not Dr. Rogers provided that during the last three years of their University course students going into medicine must improve their minds by study of Sanscrit, Arabic and other branches of learning, which would bring culture? The motion, to which he was strongly opposed, was such that no poor man's son would ever be able to enter the profession. If it had been in operation in the past it would have excluded eleven-twelfths of the best men in the profession. The whole thing was sheer nonsense, and indicated a want of common sense.

Drs. Williams, Mortimer, Sangster, Spence, Brock and Thornton opposed the resolution.

Dr. Rogers then withdrew the motion, claiming that it was the schoolmen who had burked it and who were opposed to a higher standard.

Dr. Geikie warmly disclaimed this.

Right of Representation.

At the opening of the afternoon session Dr. Sangster moved the resolution of which he had given notice on Thursday morning, and which was as follows: "That, in the opinion of this Council, all institutions which have ceased to exist, or which merely hold their charters in abeyance, no longer either teaching medicine or granting degrees therein, are not entitled to continued representation in this body."

As stated before, this resolution is directed against the right of Dr. Geikie, representative of Trinity Medical College, Dr. Thorburn, of Toronto School of Medicine, Dr. Fowler, of the Royal College of Physicians and Surgeons, Kingston, and Dr. Griffin, of Victoria College, to seats in the Council. The resolution was expected to create a warm discussion.

Dr. Griffin, the representative of Victoria College, rose to a point of order. He asked for the ruling of the President on the question, whether the resolution was in order.

President Luton said that as the motion undertook to do something which it was out of its power to do he would rule the motion out of order. The members whose seats were attacked were members of the Council by enactment of the Legislature, and had the same right to seats at the Council as any other member.

Dr. Sangster said that the ruling did not matter, because it was his intention to bring the matter up in such a form that it could not be ruled out.

Dr. Thorburn then rose to a question of privilege. He entered a protest against Dr. Sangster's statement that he was holding his seat illegally. He desired to state that he was a member of the Council by Act of Parliament, and he purposed to remain until the Act was repealed. This being the case, it was unfair to make such statements as that made by Dr. Sangster, as it had a tendency to damage his reputation with the community. Dr. Thorburn reminded the members that he was one of the originators of the Council. Had it not been for the Toronto School of Medicine this Council, of which they were so proud, would not exist at all.

Dr. Geikie rose to the same question of privilege and defended his right to a seat at the Council with equal warmth.

Dr. Fowler, when he followed Dr. Geikie, said that the Royal College of Physicians and Surgeons, of Kingston, had possessed powers before the Council came into existence, which it had handed over to the Council in exchange for representation at the board. If the institution which he represented were given its powers back they would return to the College the privilege of representation.

Dr. Griffin, for Victoria College, contended that that institution had its corporate charter as it always had. It was true that for the time being a tentative partnership had been entered into with Toronto University. It was a partnership, however, which might be severed at any moment, and from present appearances this severance might not be long deferred. The right of the College to representation they would maintain and exercise.

Question Reintroduced.

These questions of privilege having been duly stated Dr. Sangster rose and said that in place of the resolution which had been ruled out of order, he would give notice of the following:—"That it is not in the interest of the College of Physicians and Surgeons of Ontario that educational bodies which no longer teach medicine or grant degrees therein shall continue to have representation in this Council, and that legislation directed to the removal of the existing injustice in that respect shall be sought for on the first expedient occasion."

"That is quite in order," said the President.

Dr. Rogers, of Ottawa, introduced a by-law for levying the annual assessment, which he placed at $2.

Dr. Armour thought it would have been better to have heard

the financial report before introducing this by-law. He pointed out that, according to the estimates of next year, they would have a balance after expenditure of nearly $4,000.

After some discussion on this matter the by-law as introduced was carried.

The report of the Treasurer, Dr. H. Wilberforce Aikins, was eminently satisfactory, showing a balance on hand of $839.81.

Dr. Barrick introduced a resolution to the effect that a general plebiscite be taken at the time of the general election to the Council regarding contract lodge practice.

A lengthy discussion took place over this resolution, and the question of contract lodge practice was threshed out, many of the members declaring their opposition to lodge practice; but it was the general consensus of opinion that the Council had no right to deal with this matter, and that if it did interfere it would be useless.

The chairman finally ruled the resolution out of order. This ruling was appealed against, but the chair was sustained.

Dr. Carlyle was reappointed Auditor of the Council.

A White Elephant.

Dr. Roome moved, seconded by Dr. Douglas, that a special committee of three members be appointed to sell the building now occupied by the College of Physicians and Surgeons.

The discussion on this matter occupied a considerable amount of time. It was stated that since building the hall the College had lost $39,000 through it, and was losing annually. The resolution was finally adopted, with an addition that the lowest offer which would be accepted would be $90,000.

At the beginning of the evening session Dr. Bray submitted, on behalf of Discipline Committee, a supplementary report, in which it was recommended that should Dr. R. Sproule, formerly of Carlton street, Toronto, and now a resident of Newport, Vt., return to Canada, the charges impugning the authenticity of his credentials as a graduate of Dublin be investigated.

The Committee on Registration reported adversely to the applications of S. A. Carter and Robert McCullough for re-registration. The registrar was also instructed to communicate with Dr. A. J. Rayson, of Neebish, Chippawa, Mich., who had made application to pay professional visits to an island near his home, which is in Canadian territory, but within easy reach of which there is no Ontario doctor, and inform him that the Council had no power to grant permits.

Some discussion took place on the question of holding the election of officers by ballot or open voting, and it was decided to continue the election by open voting.

The annual session of the Council of the College of Physicians and Surgeons was concluded on the Saturday evening. The greater portion of the day was devoted to reading reports of committees

and the despatch of other routine business, but several debates took place on matters of external interest.

When the Council came to order for business at ten o'clock in the morning, the Executive Committee was elected on motion of Dr. Rogers. It is composed of Drs. Luton, Roome and Britton.

Dr. Brock then introduced a motion that the Council adopt some means of placing before the public the evidence in the Munyon cases, which had been adduced before the Discipline Committee.

Several of the members expressed the opinion that such a proceeding would involve a greater cost than the results sought to be obtained would be of advantage.

The suggestion that circulars containing this evidence be printed and distributed among the medical practitioners and newspapers of the Province, did not meet with approval. Dr. Barrick said that if the evidence were published in the annual announcements it would serve all purposes, and that to go beyond this would be contrary to the dignity of the Council.

The motion on being put was lost by a vote of 10 to 9.

To Exclude Educationists.

Dr. Sangster then introduced his resolution, notice of which had been given the day previous: "That it is not in the interests of the College of Physicians and Surgeons of Ontario that educational bodies which no longer teach medicine or grant degrees therein shall continue to have representation in this Council, and that legislation directed to the removal of the existing injustice in that respect shall be sought for on the first expedient occasion."

In introducing it he disclaimed any intention of hurting the feelings of Drs. Geikie, Thorburn, Fowler and Griffin, whose right to seats at the Council the motion called in question. He was simply performing what he regarded as a duty to his constituents. A great many practitioners throughout the Province were of the opinion that the educational institutions which were represented by these gentlemen were not entitled to a voice at the Council.

Dr. Britton said that it would be a mistake to go to the Legislature with such a request as that suggested in the resolution. The legislators would tell them to go back and continue as they were. He regarded the resolution as a blow, he would not say a stealthy blow, but it was in that direction, aimed at Toronto, Queen's, Trinity and the western universities. He considered that the exclusion from the Council of the appointed representatives of these institutions would be a greater blow to the Council and the profession generally.

Dr. Geikie said in the course of a speech in opposition to the resolution that the Medical Council rested solely on an Act of the Legislature, and so did Trinity Medical College. The rights of the college were perfectly secure, as the Legislature would see that they were retained in possession of them. It was since some of the

members of the Council had shown a disposition to exclude all the educationists from the direction of the Council that trouble had occurred with the Legislature. It would be a miserable rump of a Council, he exclaimed, if the educationists were excluded.

Dr. Moore said that the Council had its origin in the work and efforts of the school men, and it was monstrous to contend that they were there by an unrighteous act.

Dr. Fowler said that before the Council was established the Royal College of Physicians and Surgeons of Kingston had possessed the right to confer degrees and licenses to practise in Ontario. This right they had yielded up in exchange for representation at the Council. If that representation should be taken away, they would claim the right they originally possessed, namely, the right to grant degrees and licenses independent of the Council. He was confident that this right would be given them.

Dr. Thorburn characterized the resolution as a mean attempt to deprive the educational institutions of the rights they had handed over to the Council.

Dr. Brock moved in amendment, seconded by Dr. Logan, that as the question was a legal one it should be referred to the solicitor, and no action be taken by the Council until his opinion had been obtained.

Dr. McLaughlin and Dr. Sangster both argued that the amendment was out of order, and Dr. McLaughlin said that the colleges had been anxious for the institution of the Council, so that they might exclude the graduates of other than Ontario colleges practising in the Province, and so bring grist to their own mills.

The amendment was then put and carried by a vote of 16 to 7.

Finance Report.

The report of the Finance Committee, which was then presented, stated that the College indebtedness had decreased considerably since last meeting. The annual assessments had been more promptly and generally paid than in the past. The assets were placed at $114,839.00, and the liabilities at $63,732.00, leaving a balance in favor of the College of $51,107.00.

Dr. Armour took exception to a clause in which $317.00 had been paid to Prosecutor Wasson, over and above his salary, for expenses in connection with prosecutions. He contended that the original agreement with Mr. Wasson was that if the costs obtained from prosecutions did not cover the expenses of the proceedings the balance should be paid by Mr. Wasson himself. He thought this agreement should be adhered to.

Dr. Bray pointed out that Mr. Wasson was acting by resolution of the Council, under instructions from the Prosecution Committee, and it would be a small and unfair thing to ask Mr. Wasson to be out of pocket where he was working in the interests of the profession and of the Council. He asked Dr. Armour how he would like to be personally out of pocket under such circumstances.

Drs. Barrick and Thorburn corroborated the statements of Dr. Bray, and the matter was dropped.

Detective Wasson was again appointed prosecutor for the Council at the old salary.

The report of the Education Committee was then presented, considered and adopted. A great many petitions, the majority of which were not granted, were read. Those whose petitions were successful were: Mr. D. C. Wilson, granted with reservation; Dr. Burdon, a British practitioner, who will be admitted to practise on passing the Council examinations; G. E. McCartney, under certain conditions; Septimus Thompson, E. R. Hooper, H. H. Elliott, C. E. Elliott, F. A. Clarkson, A. A. Sheppard, J. L. Turnbull, Henri Labrossi. Licenses will be granted to Dr. Johnson, Dr. T. H. Shipman, Mr. W. D. McNab and Mr. A. L. Foster, when they pass certain prescribed examinations. The following were appointed examiners: Dr. Grasett, Toronto; Dr. Mundell, Kingston; Dr. Howitt, Guelph; Dr. Fraser, Sarnia; Dr. Welford, Woodstock; Dr. Williams, London; Dr. Acheson, Galt; Dr. Small, Ottawa; Dr. McLellan, London; Dr. O'Reilly, Toronto; Dr. Third, Kingston; Dr. W. P. Caven, Toronto; Dr. E. T. Adams, Toronto.

Interprovincial Registration.

The report of the Committee on Interprovincial Registration was presented by Dr. Williams. The report was favorable to the proposal, and the suggestion was made that the members of the Ontario Council who attend the meeting of the Canadian Medical Association at Quebec, in August, press the matter and arrange a conference with the medical men from the other Provinces. The following committee was appointed to take the matter in hand at Quebec: Drs. Thorburn, Dickson, Moore, Rogers, Pyne, Williams and Taylor. The committee was empowered to add to its numbers.

The Council adjourned after singing "God Save the Queen."

CANADIAN MEDICAL ASSOCIATION.

Some of the papers already promised for the Canadian Medical Association meeting at Quebec, on the 17th, 18th and 19th of this month:

On the Duty of the Medical Profession to the Question of the Treatment of Inebriates—A. M. Rosebrugh, Toronto. Monocular Diplopia—G. Sterling Ryerson, Toronto. Septic Peritonitis, Consecutive to Appendicitis, and its Surgical Treatment—H. M. O. Massie, St. Eustache. Goitre—C. R. Dickson, Toronto. Traumatic Rupture of the Bile Duct, Operation, Exhibition of Patient—R. W. Garratt, Kingston. Title to be announced—Wyatt Johnston, Montreal. Title to be announced—E. E. King, Toronto. Rupture

of Bladder, Operation, Recovery—R. A. H. Mackeen, Glen Bay. Spinal Caries—Clarence L. Starr, Toronto. Genito-urinary Instruments required by the General Practitioner—Ferd. C. Valentine, New York. The Pioneers of Medicine in the Province of Quebec—Madeleine Vercheres (a poem), W. H. Drummond, Montreal *(The author of the "Habitant").* Title to be announced—V. P. Dibury, New York. Title to be announced—S. C. Webster, Montreal. A discussion will take place on the Treatment of Accidents Under Anæsthetics. New Forceps for Intestinal Anastomosis—Ernest Saplau, Philadelphia. A Case of Bicornuate Uterus, Mistaken for Ectopic Gestation. A Case of Strangulated Umbilical Hernia—W. J. Gibson, Belleville. Neurasthenia—D.. Campbell Myers, Toronto. Laryngeal Diphtheria—A. Gandier, Sherbrooke.

It will be gratifying to the well-wishers of the Association to learn that this promises to be a well-attended meeting. The General Secretary has informed us that members are coming, probably, from every Province in the Dominion. If the cut rates continue on the railway and steamboat lines, the trip will be a very inexpensive one, and there is every reason to believe they will continue.

COLLEGE OF PHYSICIANS AND SURGEONS OF QUEBEC.

THE 1898 elections are now over, and the new board will be made up as follows:

District of Montreal—Dr. C. Marshall, Bedford; Dr. C. L. Cotton, Iberville; Dr. E. N. Chevalier, Joliette; Dr. M. S. Boulet, Montreal; Dr. T. Cypihot, Ottawa; Dr. E. L. Quirk, Richelieu; Dr. E. H. Provost, St. Hyacinthe; Dr. E. Turcot, Terrebonne; Hon. Dr. D. Marcil.

City of Montreal—Dr. J. E. Baril, Dr. L. J. V. Cleroux, Dr. J. I. Desroches, Dr. Girard, Dr. A. R. Marsolais, Dr. J. A. Macdonald.

District of Quebec—Dr. T. Fortier, Hon. Dr. R. Fiset, Dr. P. E. Gaudbois, Dr. S. Bolduc, Dr. Jules Constantin, Dr. J. M. Ladriere, Dr. M. Brophy.

City of Quebec—Dr. J. P. Boulet, Dr. F. X. Dorison, Dr. C. Gingras, Dr. A. Jobin, Dr. C. C. Sewell, Dr. A. Vallee.

District of Three Rivers—Dr. L. J. O. Sirois, Dr. L. P. Normand, Dr. E. F. Panneton.

District of St. Francois—Dr. P. Pelletier, Dr. A. N. Worthington, Dr. T. L. Brown.

As a result of this meeting, the administration was thoroughly reorganized, the following officers being elected: President, Dr. E. P. Lachapelle, Montreal; First Vice-President, Dr. Clark, Dean of the McGill Medical Faculty; Second Vice-President, Dr. Calettier, Quebec; Secretary, Dr. J. A. Macdonald, Montreal; Treasurer, Dr. Jobin, Quebec; Registrar, Dr. A. R. Marsolais, Montreal, in place of Dr. Beausoleil, who was defeated.

AMERICAN PUBLIC HEALTH ASSOCIATION.

COPIES of the prospectus of the American Public Health Association, which is to meet at Ottawa, on September 27, have been received. The subjects selected for discussion are: The Pollution of Water Supplies, the Disposal of Garbage and Refuse, Animal Diseases and Animal Food, Car Sanitation, Steamship and Steamboat Sanitation, the Etiology of Yellow Fever, the Relation of Forestry to Public Health, Demography and Statistics in their Sanitary Relations, the Cause and Prevention of Infectious Diseases, Public Health Legislation, the Cause and Prevention of Infant Mortality, Transportation of Diseased Tissues by Mail, the period during which each contagious disease is transmissible and the length of time for which each patient is dangerous to the community; Sanitation, with special reference to drainage, plumbing and ventilation of public and private buildings; Report upon some method of international arrangement for protection against the transmission of infectious diseases; Disinfectants; to examine into the existing sanitary municipal organizations of the countries belonging to the Association with a view to report upon those most successful in practical results; the Duties and Responsibilities of the healthy man for his own and others' health.

Upon all these subjects special committees have been appointed. Papers will be received upon other sanitary and hygienic subjects. It is expected that the attendance from Canada, the United States and Mexico will be large, and the meetings, which last for four days, highly interesting.

NIAGARA DISTRICT MEDICAL ASSOCIATION.

THE annual meeting of the Niagara District Medical Association was held at the hospital in St. Catharines, on July 13th. A large number of members from all over the district were present. The retiring president, Dr. Armour, delivered an extended address, reviewing the history of the Association, and also referring at some length to his duties in connection with the Medical Council, at the close of which, on motion of Drs. T. Clarke and W. H. Merritt, a resolution was passed endorsing his course as their representative in the Medical Council, and renominating him as their candidate at the coming elections, which was unanimously passed by the meeting. The election of officers for the ensuing year resulted as follows: Dr. Howell, President; Drs. Merritt, Leitch, Thompson and Old, Vice-Presidents; Dr. VanDerburgh, Secretary, and Dr. Sheehan, Treasurer.

Public Health and Hygiene.

... IN CHARGE OF ...

J. J. CASSIDY, M.D., AND E. H. ADAMS, M.D.

ANTI-EXPECTORATION CRUSADE.

THE Board of Health of Brooklyn has issued the following order: "Whereas the expectoration from persons having disease of the lungs, air passages or throat contains germs capable of communicating the disease to other persons, the Board of Health adjudges spitting in certain places to be a public nuisance, source of filth and cause of sickness, and it it therefore ordered, That no person shall spit upon the floor of any public conveyance, shop, store, hall, church, schoolhouse, railroad station or other public building in said town, or upon the steps of any said conveyances or buildings, or upon the sidewalk of any public way in said town."

EXPECTORATION TRACKS, TRACKERS AND TRACTS.

The first of the expectoration tracts with which the Women's Health Protective Associations in different parts of the country are thinking of reinforcing their warfare against expectoration in public buildings, street cars, and the like, have made their appearance in Boston. They are neat little cards, which invite the offender against public health and cleanliness to notice the placard forbidding expectoration.

A sample card was exhibited at a meeting of the Brooklyn Women's Health Protective Association recently. The Boston member of the Health Protective, it seems, when she sees an offender in a car, has one of these tracts ready for him, and as she is about to leave the car hands it to him and thus flees from the wrath to come. J. H. A.

Selection of Food for the Sick.

The physical properties of food vary greatly. Vegetable foods are less digestible in that they leave more refuse matter—an advantage or disadvantage, according to conditions. Thus vegetable foods, for the reason that the large residue unabsorbed in the bowel acts more or less as an irritant, become useful in constipation. On the other hand, in an irritation of the bowel the conditions call for foods which have the least amount of waste, and are therefore bland and unirritating.—JAMES TYSON, *University Medical Magazine*, February, 1898. J. H. A.

The Canadian
Journal of Medicine and Surgery

MULTUM IN PARVO.

This month we present our readers with eighty-two (82) pages of text, making our August number the LARGEST MEDICAL JOURNAL PUBLISHED IN CANADA at any price. Our subscribers will be pleased to know that the subscription price remains at $1.00 per annum.

ERRATA.

We regret that owing to a typographical error the contributions to our department of Public Health and Hygiene by Dr. E. H. Adams this month are initialed "J. H. A." instead of "E. H. A."

A WELL-WRITTEN, historical and critical review of the use of Marmorek's serum in puerperal infection appeared in *La Presse Medicale*, May 25th, from the pen of Dr. Paul Rebreyend, and, omitting the historical references, we propose to abstract for our readers the more important points of his essay.

For the successful use of antistreptococcic serum Marmorek lays down three grand principles:

1. The serum should be used as soon as possible, *i.e.*, on the second or third day.

2. A bacteriological examination is indispensable.

3. All surgical procedures, such as the use of the curette or intrauterine injections, are to be avoided, or at least confined to marked cases of retained placental tissue. An early intervention on the second or third day is put forward by Marmorek as one of the essential conditions of success; a large number of failures having no other cause than a tardy use of the serum. This alone confines the application of Marmorek's method to a small number of cases, as any experienced accoucheur knows, that the great majority of infected, puerperal patients are not treated until at a period remote from the commencement of the infection.

Of forty cases, in which the date of the beginning of the disease was noted, in three only was the injection made the first day; eight cases were treated on the second and five on the third day. These were nearly all hospital cases, occurring in patients under close observation, and treated energetically at the first rise of temperature. On the other hand, the injection was given in seven cases on the fifth day, in three cases on the sixth, and in nine cases the serum was used after the first week had elapsed, the latest periods at which this treatment was used being the seventeenth, nineteenth and even the twenty-seventh day.

Except in hospitals, where cases of infection are now rare, the ideal conditions recommended by Marmorek are not realized, and one is obliged to acknowledge that, in the majority of cases, and the graver ones at that, the use of Marmorek's serum is weighted with that unfavorable condition—a tardy intervention. If, in addition, a practitioner were obliged to wait twenty-four hours for a bacteriological test before using the serum, the patient's danger would be increased.

Most of the experimenters who have used this serum have, therefore, injected considerable quantities of it before the results of the bacteriological test were known.

Besides, what would happen when cultures would reveal, later on, some other form of pathogenic microbe, or an association of organisms, in which the streptococcus would play a very small part? The reply is, that a practitioner, during a period which is always too long, in a disease in which time is precious, would have deprived his patient of the good effects of antiseptic treatment and, without doing any good, would have permitted the virulence of the disease to increase and the patient's strength to grow less.

Added to this are the accidents, inherent in serum-therapy, to

which, in the cases referred to,(the late ones), the patient would be gratuitously exposed. For these reasons the majority of accoucheurs, even those most favorably disposed to Marmorek's method, have rejected his third proposition.

In defending this proposition at the meeting of the French Obstetrical Society, January 10, 1896, Marmorek stated, that "intrauterine treatment ought to be reserved for cases of retained placental debris or pus retained by a mechanical cause."

Obstetricians, who have seen puerperal cases admitted to the hospital on the fifth, sixth or seventh day from the beginning of the infection, understand the extreme difficulty of making such a diagnosis. As a general rule, the information given by the patient is of little use; placental debris has been repeatedly withdrawn from puerperal women,who stated that they had been completely delivered. On the other hand, the placenta alone is not the only tissue, which may be retained and cause infection of the uterine cavity. Small pieces of the membranes are sufficient to cause infection, as Dr. Laran observes. How can their presence be diagnosed? One may suspect partial retention when the womb remains large, the os uteri patulous and a discharge, containing blood from no apparent source, mixes with the more or less fetid excretions which flow from the organ. On the other hand, patients are often seen in whom the uterus is relatively small, the os uteri completely closed and yet large pieces of placental tissue are retained inside the cavity of the organ.

To clear up the diagnosis in such conditions, the essayist says, there is no other means than to carefully and deliberately employ the dull wire curette, followed by the examination of the fragments, withdrawn from the uterus. If the examination reveals placental debris, nothing simpler than to remove it; if debris is not revealed by the curette, a douche may be used to cause the outflow of the uterine secretions.

To act on the principle that something is retained in the uterus, to search for it deliberately, even in cases which appear benign in character, is the most prudent and rational treatment in such cases.

Drs. Ledrain, Ausset and Rouze have reported cases in which the use of the curette has been purposely omitted, and it must be acknowledged, that the patients recovered in spite of the neglect of this operation. In their second observation these authors attribute to the Marmorek serum a defervescence which might as well have resulted from the opening of an abscess practised the same day.

As an offset to this the essayist reports a personal observation made in the service of Dr. Lesage at the creche of the Charity Hospital. A primipara was admitted, with a serious but not exceptionally grave infection of three days' standing. The small volume and slight sensibility of the uterus, the insignificant and inoffensive character of the lochia, the generally satisfactory condition induced the attendant to admit that the delivery had been complete, an opinion in which the patient concurred. Treatment was confined to the use of Marmorek's serum. The immediate results were pretty good; the temperature fell after each injection, but rose again in a few hours. However, after a week the patient's general condition began to change for the worse. She became weaker, had several turns of bilious vomiting and her pulse became frequent. The attendant then used the curette and removed some placental debris not remarkably fetid. In spite of repeated uterine douches, subcutaneous and intravenous injections of artificial serum, which gave a momentary relief, the patient died on the seventeenth day of her illness. The autopsy revealed a uterinecavity, covered with a purulent, pseudo-membranous coating, the Fallopian tubes quite healthy, and a generalized, purulent peritonitis, the pus from which, when cultivated, yielded cultures of streptococci and bacterium coli. The patient received from the beginning of the attack more than 200 c.c. of Marmorek's serum. It is reasonable to think that, in this case, an early and complete surgical treatment would have given the best chance of preventing peritonitis and saving the patient's life; the antistreptococcic serum, which confined its operation to causing ephemeral falls of temperature, had no influence on the progress of the infection. Dr. Rebreyend concludes: After listening to opinions so different and experiments so contradictory, what must one conclude with regard to the indications for treatment? Professor Landouzy, in his recently published work on "Serum-Therapy," appears to have given the best reply to this question.

No doubt the preoccupation of Marmorek, inspired by considerations of general pathology, influenced perhaps by Roux's method, may partly find its justification in a legitimate fear of fresh inoculation, operative shock or emboli. Nevertheless, to make of the uterine cavity, according to the happy expression of Professor Landouzy a *noli me tangere* appears to be a dangerous exaggeration.

The surgeon or accoucheur will have to observe great gentle-

ness in his intrauterine manœuvres and an asepsis, which will make them innocuous. As Landouzy says, in the work mentioned above, "No one has the right to share Marmorek's exclusivism. To-morrow, as yesterday, I shall continue, while practising serum therapy at the start, to use calmly and gently such treatment as appears to be called for by the state of the uterus and the general condition of the patient." J. J. C.

DISCIPLINE COMMITTEE! WE EXTEND CONGRATULATIONS.

During the past two or three weeks, since the praiseworthy actions of the Discipline Committee of The Ontario Medical Council in removing peremptorily the names of several black sheep in our profession from the roll of those entitled to practise medicine, the public press has been full, more or less, of communications from all sorts and conditions of people setting forth their opinion that The Medical Council has been empowered too freely by the Legislature to act upon the dictates of their own conscience in matters of this kind, some writers even going so far as to call upon the Government to nip the movement while it is in the bud and not permit a few men to entirely control the question as to whom they will allow to practise medicine and whom they will prevent. One of the most nonsensical articles coming under our notice was an editorial appearing recently in the *Weekly Sun*, where the writer made an attempt to prove that the medical profession would, if controlled as at present, very soon become worse than a close corporation, and that it would soon be an impossibility for any young man who had not unlimited means to ever hope to attain to the degree of Member of the College of Physicians and Surgeons of Ontario.

In comparison with the article referred to, we are pleased to give our readers an editorial written by Canada's foremost newspaper man, Mr. E. E. Sheppard, and which appeared on July 16th in *Saturday Night*. We think Mr. Sheppard's ideas on this important question so well presented that they will voice the opinion of every ethical medical man, and though crowded for space we feel we cannot do the subject greater justice than by quoting the article verbatim. Mr. Sheppard says:

"I have no sympathy whatever with those who are declaiming

against the College of Physicians and Surgeons of Ontario because they reprimand and strike from membership 'quacks' who mislead people and obtain money under false pretences. The people of Ontario would be mad to annul the laws which now protect them from malpractice and advertising doctors. As a rule, doctors are poorly paid, do a vast amount of work for the poor which is never recognized, and prevent immorality and 'quackery' to an extent which is quite incomprehensible to the man who has never studied the subject. The man of genius gets the most money; the man of talent gets his share; the mediocre man does a lot of hard work for all he gets; the man who has passed his examination but is not clever finds his place. If we had no law directing this the poorest man in the lot by advertising and solicitation would obtain a practice for which he is not fitted, while the best men would only be appealed to in cases of emergency. The law restrains the doctors, not the public. If the public desire to be foolish and to use quack medicines and to consult quack doctors, they can do so, but the stamp of illegitimacy is placed where it belongs. Why should the public complain? It is a matter which the public does not understand. Disease is a terrifying thing, and those who use the terrors of disease to force people to undertake great liabilities financially are those who should be stricken from the list of licensed doctors. If the doctors of Ontario were to use their knowledge of what people have done, of the diseases they have had, of the predicaments they have been in, society would be rent from end to end. Then why should newspapers be continually clamoring for a rearrangement of our system? The disruption of the present system would mean quackery, blackmailing and evils which cannot be enumerated.

"It is much better that we should encourage our doctors to be gentlemen and join with them in resisting the growth of the tendency to take people at their advertised value. No self-respecting man or woman would state in an advertisement his or her exceedingly great qualifications for curing disease when thousands have passed the same examinations, have probably had a greater experience, and are bound by the obligations of the medical fraternity not to frighten patients into paying large sums nor traduce the scientific qualifications of their brethren. If the public would think for a moment of how the medical business of the country would be conducted if there were not some restraint on doctors and advertisers of remedies, they would see that it is entirely in their own interests that scamps and mountebanks and malpractitioners should not be permitted to retain a license.

"It is the same in law. If everybody could be a lawyer who desired to put out a sign, the people would be robbed right and left. Is it not better to have some ethical standard, some means of punishing the one who encourages the client into unhappy litigation? Is it not better to establish, as far as can be established under the conditions of human frailty which surround every busi-

ness, a legal fraternity which, on penalty of losing a license, must behave properly to those who trust them? We trust the lawyers with our money and our business, but we trust the doctors with our lives, and surely no law can be too censorious which enables the doctors elected by their own guild to say who shall be stricken from the rolls.

"There are many doctors who are not entirely professional in their conduct, and these are the hardest to reach, but warnings can be made of men who so far depart from the teachings of the colleges which graduate them that they advertise to cure incurable things and to do impossible things. It is not a clever thing, a charitable thing, nor a decent thing, to obtain the last few dollars of a dying man on a promise to cure him of that which cannot be cured. The College of Physicians and Surgeons of Ontario, who have been in session, have been punishing men who have been doing this sort of thing. Instead of resenting the strictness of their discipline the public of Canada should applaud it."

We need only add that we are glad to notice that the name of a man, by name of Dr. Sproule, has been reported to the Discipline Committee for consideration. W. A. Y.

ABORTIVE TREATMENT OF FACIAL ERYSIPELAS.

Dr. Lobit, of Biarritz, in *La Presse Medicale*, June 18th, has introduced a novel treatment for erysipelas of the face, which has proved curative in twenty-five cases in his practice. The preparation consists of

Iodol	10 parts.
Collodion	90 parts.

It is a brown sirupy liquid, something like molasses. It is applied with a brush or swab, made of bits of lint attached to a stick and is painted over the erysipelatous patch, extending the application $\frac{1}{2}$ to $\frac{3}{4}$ inch beyond the inflammatory zone. A thick, even coating of this liquid should be used. It dries rapidly and assumes a whitish appearance. According to Dr. Lobit, three or four applications suffice to bring about the complete disappearance of the disease. When erysipelas attacks the hairy scalp in a male, Dr. Lobit advises to shave the hair and apply the iodol preparation over the affected area. If the patient is a female, unless the disease is exceptionally severe, the surgeon should rest satisfied with repeated local applications to the affected parts, using, at the same time, a certain amount of pressure in order to make the liquid

penetrate the skin between the hairs. Under the influence of these applications the redness, swelling and hardness disappear and the local temperature falls in a perceptible manner. Besides, far from being a painful application, it relieves the tightness of the tissues and makes the patient feel more comfortable. In all the cases treated, the onward march of the disease was checked in three or four days at the furthest. Two relapses were noted about the eighth day, but they yielded to fresh applications of the iodol mixture.

As Dr. Lobit offers no explanation of the *modus operandi* of his preparation, we have thought it might be explained as follows: Iodol is made by precipitating pyrrol with a potassium iodide solution of iodine. It is a tasteless, pale yellow crystalline powder, nearly odorless and decomposed by heat with the evolution of iodine, leaving a bulky charcoal as a residue. It is almost insoluble in water (1 to 5,000), easily soluble in alcohol (1 to 3), ether (1 to 1), and chloroform. It contains 88.9 per cent. of iodine, and is a substitute for iodoform. The combination of iodol with collodion is a happy one, for the solubility of the iodol and its subsequent elimination of iodine are certainly enhanced when iodol is placed in a solvent containing, in a total of forty-nine parts, thirty-six fluid parts of ether and twelve fluid parts of alcohol.

The curative action of iodol in erysipelas may be due to the fact, that the liberation of the contained iodine keeps pace with the micro-organisms along the lymph vessels. In this the iodol is mechanically assisted by the collodion, which, by the contraction it produces in setting, reduces the amount of blood and inflammatory products in the diseased tissues. The collodion also affords protection from the air to the inflamed area, relieves the feeling of tightness in the tissues and promotes their physiological rest.

Recent improvements in sanitary science and its practical applications, and the adoption of various antiseptic precautions in surgical practice, have immensely reduced the frequency and mortality of erysipelas, which was formerly the scourge of hospitals. It still, however, exists, and occurs in small epidemics, which are specially frequent during the prevalency of east winds, or of cold, damp weather. In the presence of an epidemic, persons suffering from renal, cardiac or hepatic disease, or dropsy from whatever cause arising, are particularly liable to be attacked, as are chronic alcoholics, women in the puerperal state, and all those who are poorly fed and clothed.

There is nothing new in painting an erysipelatous patch and the skin around it with collodion. The combination of iodol with collodion is, however, a novel therapeutic application in facial erysipelas. As in Dr. Lobit's hands it has proved very satisfactory, we hope that some of our readers will try it in their practice and give us the records of their experience with the new preparation.

J. J. C.

MEDICAL COUNCIL MEETING.

In discussing this year's proceedings of the Medical Council, the Toronto *World* says:

"They are not such awful people, the members of this body, the name of which is sufficient to cause the anxious student nights of worry and thought preparing for the dreaded ordeal and hoping he may be after in the position of having 'passed the Council.' Through watching the processes of this body certain individualities were impressed on the mind of the onlooker. Perhaps not in all cases because the individuality was so marked as that the owner of it appeared so many times in an oratorical capacity.

"Doctor Britton, whose clean-cut face (one a woman might love —if the doctor will permit), thoughtful and stern, in conjunction with the eyes, forces the impression on one that in the passage through life sorrows have been encountered. The doctor's words are clear and manly.

"Doctor Thorburn sits as if it were an old story to him—he seems to think, perhaps retrospectively, while some of the speakers are trailing out the thread of a profitless discussion.

"Dean Geikie's accents are as mild as his face, though he is not lacking in readiness of retort, and speaks clearly and with knowledge when he does speak.

"A great big terrible man is Dr. Moorehouse, of London, who looks as if, outside of his profession, he might like a delicate masse shot or a canter on a good horse, and if, instead of the seductive sideboards, he had the long lingering whiskers of President Luton, he would, with his physique, make an ideal 'Taffy.'

"President Luton sits and watches the speakers seriously, giving no evidence of impatience, and finally ruling to the satisfaction of all. He will make an ideal president of this august body.

"Dr. Williams is a very zealous member and to his zeal may be ascribed his rather frequent orations, for he sometimes theorizes, and is not above appearing in emotions occasionally.

"Dr. McLaughlin deals with facts, expresses himself and sits down. He sits next to Dr. Sangster, who raises in a dry, cultivated voice, combative measures with no combative intentions; he (Dr. McLaughlin) and Dr. Armour sit side by side and do a good deal of

the talking, or at least furnish subjects and points on which to hang theories.

"Dr. Armour presents more the appearance of a specialist who would chase butterflies or classify rocks than a feeler of pulses.

"Whenever I gaze at Dr. Armour I involuntarily look around for a large white hat and a colored ornithological plate; even his gold-rimmed eyeglasses heighten this feeling.

"Dr. Barrick should explain why his hair and moustache are white. He speaks to a motion like a steam engine. You see the mass move, slowly and deliberately, then a little draught catches, the connecting rod stiffens, and finally the mechanism is in full operation.

"Very little talking is indulged in by Dr. Logan, but, unlike some of his brother doctors, he says something when he speaks.

"A delicately-made man is Dr. Campbell; his pointed beard, and hair parted in the middle, both rather grey, assimilate charmingly with gold eyeglasses and a light summer suit."

THE RAILROAD SURGEONS.

TORONTO was proud of the distinction of being chosen as the 1898 meeting place of the International Association of Railroad Surgeons. As a convention city our pretty "Queen of the West" is adding constantly new stars to her crown of popularity, and in a measure Canada is becoming known to our cousins from Uncle Sam's domain as the lucky country where Toronto and half of Niagara Falls are located! Annually, for a long term of years, this Association has convened in many cities in the States, but this year, for the first time, has honored Canada by its presence, and so we ask, was the convention a success? We think it was. First, scientifically, for many interesting papers were read and discussed, and few, if any, of those present departed without new ideas on some favorite branch of medical research, or at least gained a new inspiration which will give cheer to their oftentimes lonely and dispiriting work. Was the convention a success, fraternally? We think so, in two senses, internationally, and socially. At any time it would be impossible to ignore the fact that the United Statesers and Canadians stand together on the common platform of brotherhood, made friends by the great forces that are determined by a common language and character, not by fleeting "political bias or divisions." And what could have expressed this feeling of good fellowship better than the election of our confrere, Dr. Riordan, as

the president of the Association for the ensuing year. As a medical man and as a Canadian, Dr. Riordan will bear well "his blushing honors." May we crack a wish-bone with Dr. Bouffleur of Chicago, and whisper the wish that he may be the *fin de siècle* President of the Association. Was the convention a success socially? We think so. Sincere was the welcome extended and enthusiastically was it received. In fact, the greeting might have been fitly voiced by the old words, "If thy heart be as my heart, give me thine hand."

Only once did King Sol fail in his duty—the day of the banquet at Exhibition Park. Punctually at the starting hour came a heavy downpour of rain; but even as the shower continued a happy though damp-looking crowd filed into the boat, and watching them, some one wondered that they all "braved the elements" and came. A dark-eyed Southern physician caused a hearty laugh by telling in inimitable style the following negro story:

"Dinah said to Pete: 'Pete, why fu didn't you come to the party?' 'Wall, Dinah, de truth is, I woz sont fur to went, but the *gwin* was so bad that I couldn't came.'"

All we need add is Pete did *came*. The day's outing by special car and boat to Muskoka, for which thanks are due to the management of the Grand Trunk Railway, was voted one of unalloyed pleasure by all. The hours took wings, as bright repartee, capital stories and "jests went round the merry board," and somebody said, as we steamed into the depot at night, "surely the best of the wine was kept for the last of the feast."

We were charmed to meet and greet our guests, sorry to part with them, and would like to have them return at some time in the near future. So we will not say good-bye, but simply *au revoir*. "For it's a way we have in Toronto." W. A. Y.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

The first meeting of the directors appointed at the annual meeting in June last, was held on the 22nd of July, when the following officers were elected for the ensuing year:

President, Dr. J. E. Graham; Vice-President, Dr. W. J. Greig; Secretary, Dr. H. J. Hamilton; Treasurer, Dr. Herbert Bruce; Curator, Dr. N. A. Powell; Assistant Curator, Dr. W. J. Wilson.

The establishment of an Academy of Medicine, as urgently

advocated by Dr. Osler at the annual meeting and reported in a recent issue, came up for consideration. As the proposal had the unanimous approval of the directors, it was thought that the scheme merited a full and free discussion and the serious consideration of the three medical societies which are interested equally with this Association. It was therefore hoped that this subject would be brought to the notice of each Society as soon as the Autumn meetings are well under way.

For the purpose of making the Association more useful to its members and to the profession of the Province outside of Toronto, it was pretty well decided to have printed and distributed among the members a catalogue of the more important and useful works now on the shelves.

Heretofore the library having been open only from two to six o'clock each afternoon (Saturdays excepted), the directors feel that the opening of the library during the morning hours would be of advantage to some of its members. Henceforth, we understand, the library will be open after September 1st, during the morning as well as the afternoon. This, we are given to believe, depends somewhat upon the support and encouragement accorded by the Toronto members. We trust that the reading, the progressive, the advanced among our confreres will take steps, if they have not already done so, to identify themselves with an Association which was originated by the profession, is maintained by the profession, and conducted solely in the interests of the profession, and therefore indirectly for the benefit of the public at large. W. A. Y.

WHAT DOES IT MEAN?

THE *Canada Lancet* for July has an editorial dealing with a communication sent in to that journal by a correspondent, regarding certain statements made in a previous issue as to the connection of the Keeley Company with a recent attempt made to introduce medical treatment for inebriates into our gaols and prisons, and in which the Keeley people refute having ever made any such efforts. The editor, in taking back water as to what had been previously stated, and in referring to the Keeley system, makes the following astonishing statement at the end of his article:

The profession has not changed, and will, we trust, never change its attitude of opposition to a cast-iron commercial organization like the one in question.—ED. (Italics ours.)

We say astonishing, in the face of the fact that this otherwise excellent journal has been running for some time past a full page advertisement of the Keeley Institute, on Sherbourne Street, where a system of treatment is administered, the ingredients of which are not divulged to the medical profession in any shape or form. Consistency, thou art truly a jewel.

W. A. Y.

We neglected to report in our issue of July that at this year's meeting of The Ontario Medical Association Dr. E. Playter, who has recently moved to Toronto, read a paper of considerable merit on "Hypo and Hyper Respiration in Phthisis." It was a typographical error on our part and we are glad to make the correction. Dr. Playter recently presented to The Ontario Medical Library forty handsome volumes, which are greatly appreciated.

Obituary.

ROBERT MOFFATT, M.D., DECEASED.

We are pained to have to note the awfully sudden death of Dr. Robert Moffatt, on the 19th ult. The Doctor was having some teeth extracted by Dentist Lougheed, on Parliament Street, in this city, and had some chloroform administered to him by Dr. Bray for that purpose. After having two or three of the teeth extracted, symptoms of cardiac collapse appeared, and in spite of everything that could be done, Robert D. Moffatt passed away. The deceased was a young pushing practitioner, and commanded the universal respect of his patients. Dr. Moffatt, who was thirty-three years of age at the time of his death, was the son of Rev. Dr. Moffatt, a Presbyterian minister. He was a graduate of McGill University, Montreal, and since he left that institution had been practising in Toronto. By his careful work and pleasant manner he had built up a lucrative practice, and made many friends in the east end of the city, and had won the esteem of the other members of the profession. He was married three years ago, and leaves a widow who has the sympathy of the community in her sad bereavement. Dr. Moffatt had been medical examiner for the Merchants' Life Association since its inception, and occupied a similar position in the Independent Order of Foresters. We extend our sympathy to the family of the deceased. The funeral was largely attended by city medical men on the 21st.

Correspondence.

IS IT A COINCIDENCE ?

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY :

SIR,—It has been asked if there are any editorial writers upon the staff of your JOURNAL who are also upon the *Canadian Practitioner*, because of the similarity of the editorial in the June numbers dealing with the subject of "Interprovincial Registration." For the instruction of the readers of your JOURNAL it may be said that there are no *duplicates* of the kind, and it may prove interesting also to point out that your JOURNAL was in the hands of its readers some time before the *Practitioner* appeared, and yet when the editorials are compared, one could readily believe they had been written by the same pen. Perhaps the one inspired the other, but if that is the case, surely the CANADIAN JOURNAL OF MEDICINE AND SURGERY deserves some credit. Some comparisons will be interesting:

". . . . for some time past they had been 'blowing hot' at the Canadian Medical Association, and then 'blowing cold' when the matter was brought up in the Ontario Council, thus blocking the matter behind the screen of Sec. 26 of our Medical Act, saying, 'we are all prepared, just as soon as you can come up to our standard.'"—*Canadian Journal of Medicine and Surgery, June, 1898.*

"This carelessness has amounted really to discourtesy towards the Canadian Medical Association, manifested on various occasions; . . . There is a certain section (26) of the Ontario Medical Act, . . . and has been quite sufficient for the Council. . . . You people that live in the outlying districts of Canada must come up to our standard."—*Canadian Practitioner, June, 1898.*

Another:—

"They seem to forget that this reciprocity will be a great benefit to Ontario, in that it will open up to Ontario's graduates farm provinces in which there is no medical school, etc. . . . . Our Ontario barriers have kept many *incompetents* out of this Province, but it is probably also true that they kept many a similar class in."—*Canadian Journal of Medicine and Surgery.*

"It may be well to remember that there are two sides to that

question. We have now more doctors in proportion to the population than the other Provinces. On the interchange that is likely to take place under interprovincial registration, we would probably have more going out than coming in to Ontario. . . . . The present regulations tend to prevent large numbers . . . from going out to the newly developing districts in the far West."—*Canadian Practitioner.*

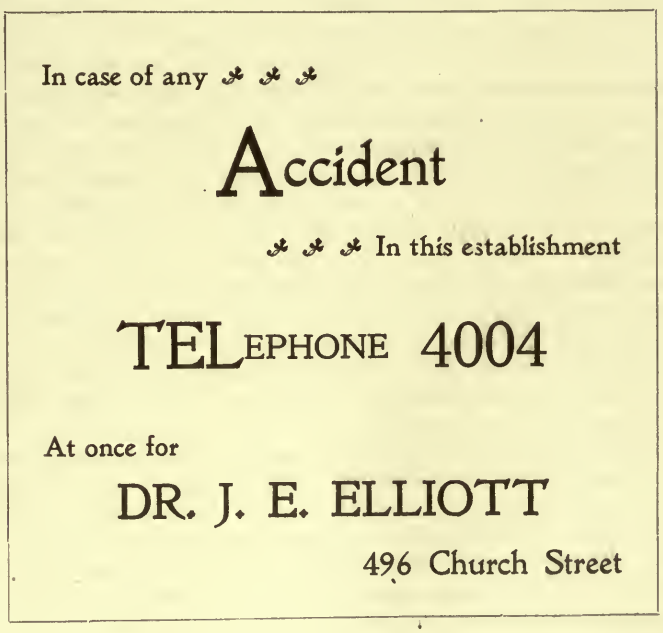
It would be entertaining to have this explained.

CONSTANT AND INTERESTED READER.

IS THIS PROFESSIONAL?

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY :

GENTLEMEN,—I was astounded beyond measure the other day to come across the following advertisement pasted up alongside of a telephone in one of Toronto's business houses, printed in blue and red ink. Surely such cannot be professional :



PRACTITIONER.

THE INTERNATIONAL ASSOCIATION OF RAILWAY SURGEONS, MUSEUM, 1898.

The 1898 museum was in every respect creditable to both the Association and the exhibitors. It was held in a large, well-lighted room immediately in the rear of the convention hall, and owing to the Committee of Arrangements having put up plenty of signs in the halls, directing the attention of visiting surgeons to it, there was a constant and large attendance of members at all of the stalls. There were shown a large number of exhibits of surgical instruments and appliances, as also pharmaceutical products from all of the principal houses in Canada and the United States. Among the exhibitors were:

R. L. Gibson, of Toronto, who is Canadian representative for such houses as Duncan & Flockhart, of Edinburgh; the Maltine Manufacturing Co., Palisade Manufacturing Co., Arlington Chemical Co., and many other equally important houses, exhibited several of his principal preparations, all of which were much admired, and most favorable comments made upon the excessively *recherche* manner in which they were put up. Mr. Gibson showed:

Lactopeptine. The New York Pharmacal Association was *en evidence* with an exhibit of their preparation in its various forms, including Lactopeptine Powder, Tablets, Elixir (plain) Elixir with Iron, Quinia and Strychnia, Elixir with Bismuth, Elixir with Gentian and Chloride of Iron—two last named combinations being recent additions to Canadian list. The preparations of this house, we need hardly say, are held in the highest esteem by the profession, and are used the world over. Because of their high standing they are of course marked out by the substitutor, of which genus, we regret to say, there are a few specimens even in Canada. The firm is now considering a means of dealing with this excrescence. Meantime, physicians would do well to see that imitations are not foisted upon their patients. Where a man is discovered indulging in this infamous and nefarious practice, no pains should be spared to make the fact widely known. There is nothing to prevent any physician, who desires to protect his patients from substitution, advising them to patronize only such pharmacists as he has good reason to believe are above such fraudulent and contemptible proceedings.

Maltine. One of the most interesting features of this exhibit was furnished by the Maltine Company, who exhibited, in large crystal bottles, specimens of various combinations of their well-known product. Demand for samples was lively and well maintained, the house undertaking to deliver samples free of charge to all who requested same, either in Canada or the United States. No physician who has once experienced the action of Maltine in convalescence will ever undertake to pull a patient together without enlisting this valuable "builder" in the work of reconstruction.

D. F. & Co.'s Flexible Capsules. The medical profession

throughout the Empire have stamped these capsules with their approval as the most effective and elegant form of medication, and we have much pleasure in advising our confreres that they are now fully available in Canada. Because the profit upon these goods is not so great as attaches to ordinary pills some druggists have taken considerable pains to kill demand for them by representing that prices are prohibitory, and charging accordingly when these goods are ordered. We have no hesitation in asserting, nevertheless, that, efficiency considered, these capsules are the cheapest in the end, and this, no doubt, will be the verdict of every physician who gives them fair trial.

* * *

SHARP & SMITH, of 73 Randolph St., Chicago, Ill., showed a full line of surgical goods. The exhibit was in charge of Messrs. Zan Cotter and Harry Crowthers, and comprised samples of a full line of surgical instruments and hospital supplies. Among the latest inventions of instrument were shown a device for obtaining the urine separate from the two kidneys in either sex. The instrument is now used by all the leading superior specialists in the United States, and can be used by anyone possessed with ordinary skill and care.

A new needle-holder, just invented, which will release the needle instantly without exerting full pressure, an objection to many of the old styles on account of breaking needles, etc. (The above two instruments are the invention of Dr. M. L. Harris, of Chicago).

Among other instruments of recent invention are a ligature cutter, a uterine curette and a Rongear forcep, and a pair of decalsified bone couplers for intestinal approximation.

Altogether, it is little wonder that this well-known firm created so favorable an impression.

* * *

J. H. CHAPMAN, of 2294 St. Catherine St., Montreal, had a complete stock of goods to show, and had his time fully occupied in explaining the action of some of his most modern appliances to visitors. His display was certainly very attractive to the eye, and comprised practically a complete collection of modern and high quality instruments.

Among the articles shown were especially noticed, Hayem's Hæmometer, Nachet's Microscopes, with 1-12 and 1-18 oil immersion lenses; Hoppe's Universal Splint; Metzger Centrifuge for urine and blood; Schimmelbusch's Combined Portable Sterilizer; Deformity apparatus; a large assortment of instruments made by Weiss (London), and Collin (Paris); also prepared skulls and other anatomical constructions by Tramond (Paris); Aseptic Pocket Cases; all these and many other articles combined to make a really interesting exhibit.

BOVRIL LIMITED, of Montreal, exhibited their excellent preparation of meat put up in almost every conceivable form, from tablets down to the regular extract. It is little wonder that Bovril is meeting with greatly increased sales every month, as it is a genuine product and one of more than ordinary worth. The exhibit was in charge of the Canadian manager, Mr. Silcock, and his son.

* * *

THE HOT APPLIANCE CO., of New York, had a most attractive stall, in charge of Dr. and Mrs. Spurr. There were shown a full line of their appliances,so shaped as to be applicable to any and every part of the human body. It is very interesting to see how this apparatus can be applied to any inflamed chest or abdomen, or a swollen joint, and kept warm and at a certain temperature for twenty-four hours by the use of ten cents' worth of methylated spirits. Dr. Spurr had so many applications for the goods that he was entirely sold out.

* * *

THE FULLER CO., of Rochester, N.Y., made an exhibit of their artificial limbs, and caused a great deal of genuine amusement by having their "legs" in charge of a man who himself had been a victim of a railroad accident, and wore two "walkeasy" legs made by this firm. The ease and comfort exhibited by this chap, in getting around, mounting and dismounting from his wheel, was certainly surprising, and says a good deal for the legs he wore.

* * *

The two spaces at the head of the stairway were taken by LEEMING, MILES & CO. of Montreal. In one was a tastefully arranged display of Seabury & Johnson's goods, including various kinds of plasters, bandages, absorbent cotton, lint and medicated gauzes, oiled silk, medicated soaps, surgical ligatures, etc., etc., which reflected great credit upon the Seabury pharmacal laboratories, and showed the pains taken by this firm to maintain the high standard of their goods. Mr. Marvin, of the New York staff, was in attendance at this section, as well as a local representative of the Montreal house.

In the other space Mr. Chas. E. Lamb, representing J. M. Grosvenor & Co., of Boston, displayed the advantages of dispensing powdered drugs in Konseals, a tasteless and soluble form.

* * *

LLOYD WOOD, of Toronto, who is Canadian representative for such firms as the Lambert Pharmacal Co., of St. Louis, Mo., the Merz Capsule Co., of Detroit, Mich., etc., had a very elaborate exhibit of the former Co.'s goods which attracted gratifying attention. Together with that, and the complimentary remarks with which refreshing and appetising draughts of that well-known malt extract, made by the O'Keefe Brewing Co., of Toronto, of which a

large display was made, were received by the visitors, it is little wonder that the youthful blushes of Mr. Wood were increased rather than diminished. The Lambert and O'Keefe Cos. are to be congratulated on so materially increasing the interest of this year's museum.

* * *

The Cereal Machine Co., of Worcester, Mass., had, under the charge of their popular Canadian agent, Mr. Hewitt, a large and more than ordinarily attractive display. They showed their shredded wheat put up in many forms and made the very teeth of the crowd, who constantly stood around the exhibit, "water." Mr. Hewett served shredded wheat and strawberries to everybody, and luscious indeed it was. With that and wheat-shred-drink, the wants of the inner man were well looked after. There can be little doubt that the products of this house will meet with an ever increasing demand amongst medical men, as shredded wheat is palatable, easily digestible, as well as nourishing.

* * *

Gilmour Bros. & Co., of Montreal, who, among their other many valuable agencies, hold that of the Horlick Food Co., of Racine, Wis., had an artistically built turret of this food erected close to the head of the stairs. That food is well known among the profession, and deservedly so; but—tell it not in Gath, etc., etc.—those visitors who "stood in" with this firm's representative, and who had any excuse for complaining of thirst, had their palate delightfully irrigated with a drink of extraordinary character, composed of Horlick's Food and—well, it was not aqua pura, anyway. The mixture was all right, and don't you forget it!!

* * *

Max Wocher & Son, of Cincinnati, Ohio, made a large exhibit of surgical instruments and appliances in the north-east corner. Mr. Schmidt was in charge, and was unceasing in his efforts to interest the many who favored him with a call.

* * *

Among the most attractive displays of surgical instruments and appliances was that of S. B. Chandler, Son & Co., Limited, 108, 110 and 112 Victoria St., Toronto. The firm in question carries not only a complete assortment of surgical instruments, but also full lines of pharmaceuticals, electric apparatus, rubber goods and the various other items that go to make up a physician's supply.

Conspicuous features of their display at the Railway Surgeons' Convention were as follows: (1) A physician's operating table, devised by Dr. J. J. Buchanan. This table may be folded and carried in a buggy, being a marvel of compactness. It is made completely of iron, with a white enameled finish, and can be adjusted to every position required in surgery or gynæcology, in-

cluding the Trendelenburg position. The price of the table itself is $20.00. Foot-rests and leg-holders are $3.00 each, extra, and the leatherette cushions with it, if required, are $8.00 extra. (2) This firm also showed a very handsome instrument cabinet, constructed of iron, with white enameled finish, with three crystal plate glass shelves, and bevelled edge crystal plate glass in sides and door, and furnished with lock and key, the whole apparatus being dust proof. The dimensions are, height 32 inches, front 20 inches, and depth 16 inches. The price is $45.00. We also observed a very useful as well as handsome instrument table, made of wrought iron, with top shelf of heavy glass, the price of which is $6.50. (3) Chandler, Son & Co. are the exclusive agents for the Dominion for the microscopes and microscopical accessories manufactured by the Bausch & Lomb Optical Co, of Rochester, N.Y., who turn out goods of this character unsurpassed by any firm in the United States or abroad. All articles made by Bausch & Lomb are issued with an entire guarantee that from the standpoint of workmanship, they will be found conforming to the requirements of the most critical operator.

Another Canadian agency, held by Chandler, Son & Co., is for the sterilizers made by Wilmot Castle & Co. The advantages claimed for these sterilizers are, (1) the rapidity with which they will heat; (2) the fact that it is almost impossible to boil them dry, as the steam arising from them is condensed and used over and over again; (3) in view of their limited size they afford an unusual amount of space for depositing instruments and other articles to be sterilized.

A number of our American friends seized the opportunity to inspect the establishment of Chandler, Son & Co. at their headquarters on Victoria Street, and spoke in highly complimentary terms of the extent and completeness of the stock of physicians' supplies carried by the firm named, including, as it does, not only the goods above spoken of, but also trusses of all kinds, silk elastic hosiery, invalid chairs and sick room appliances, orthopædic apparatus, pharmaceutical specialties, as well as a varied assortment of drugs, chemicals, etc., etc.

* * *

Parke, Davis & Co, of Detroit, Mich.; Windsor, Ont.; New York and Chicago, had a most attractive exhibit under the charge of that hustler of hustlers, W. F. Whelan. At this point we might say that this firm could hardly find a more enthusiastic detail man than Friend Whelan, as the boys say that, even when dreaming, his lis keep muttering, "Doctor, specify P. D. & Co.; specify P. D. & Co." Parke, Davis & Co. had a full line of their Pepsin products, including Essence of Pepsin, Pepsin Cordial, Glycerole of Pepsin, Lactated Pepsin, etc. They also exhibited their Egg Emulsion of Cod Liver Oil, which caused gratifying comment.

The exhibit which always had the biggest crowds gathered

around it was that of Professor Taka-mene, the inventor of Taka-Diastase. The Professor has been for some time with Parke, Davis & Co., and has sole charge of the manufacture of the preparation which has been named after him. His experiments with Taka-Diastase and its action on starch, as proved by using iodine from time to time, were thoroughly interesting, and it is safe to say that no doctor who witnessed the Professor's conclusive experiments could go away without remembering them and carrying them into practice after returning home.

* * *

At the top of the stairs was a small selection of the many lines of goods put up by the JEYES' SANITARY COMPOUNDS CO., London, and sold by the Jeyes' Sanitary Compounds Co. of Canada, Montreal.

Jeyes' Refined Medical Liquor is not only a standard article in the surgery and dispensary, but Jeyes' Fluid is a household requisite in the Old Country and Europe, where it has taken the leading place as a reliable and absolutely safe disinfectant and antiseptic.

In fact, ever since Koch and Von Esmarch tested this preparation so fully in their laboratory at Berlin, and stated, as the result of their researches, that Jeyes' Fluid destroyed germs in ten minutes which withstood carbolic acid for four days, the profession has accepted it as the very best disinfectant.

The company are now putting up a refined quality for surgical and medical purposes, and as this is not only purer, but also less alkaline, it is recommended for professional use.

The disinfecting fluid is put up in bottles, and in drums and tins, for general sanitary work, and samples of the different packages were exhibited. A very handsome exhibition drum, in scarlet and gold, formed the apex of the exhibit.

The surgeons were all greatly pleased with the surgical gauze, which is specially made of pure fabric, and carries a ten per cent. strength of the fluid. A special surgical soap, also of ten per cent. strength, in a handsome case, for the instrument bag, was also greatly admired.

The ladies were naturally more interested in the very choice toilet soaps and tooth and soap powder, in which the antiseptic is cunningly blended with perfumes. The Senalia Soap especially came in for praise, while the cute Tooth Soap Tablets were much admired.

The Dog Soap and Veterinary Ointment attracted attention from the lovers of animals, and it appeared that some believers in Jeyes' goods, who had not met with the Dog Soap were using the fluid in the washing water for their pets and had found it very satisfactory.

Jeyes' Company have the high honor of being appointed purveyors, by special Royal Warrant, to Her Majesty the Queen and

H.R.H. the Prince of Wales, and also to H.M. Government of India and H.M. Board of Trade, so that their goods take the very highest rank. And the fact that the fluid, although such a perfect germicide and antiseptic, is non-poisonous, is of the very greatest importance to those who want a safe and reliable remedy.

It may be added that Jeyes' Company (London) are the inventors and sole manufacturers, not only of Jeyes' Fluid and its many preparations, but also of the cruder form, Creolin (registered), and other forms of the antiseptic.

* * *

Among other firms exhibiting, and which our space this month prevents us enlarging upon, were, Stevens & Co., Toronto; Carveth & Co., Toronto; Truax, Green & Co., Chicago; Clark & Roberts, Indianapolis; the Chicago Book Co.; and Emil Willbrandt & Co., St. Louis, Mo.

CATCHING COLD AS A CAUSE OF DISEASE.

"CATCHING cold," in the ordinary and still prevailing sense, does not exist, according to a recent German authority.

In general, "catching cold" plays a very subordinate rôle as an etiological moment. In inflammatory diseases, "catching cold" can appear simply as a disposing cause.

It usually depends upon the action of thermic agents, which are usually unavoidable, *i.e.*, chief of all upon very slight degrees of cold.

Individuals of advanced age, febrile patients, and those suffering from kidney affections appear to be more disposed to diseases resulting from "catching cold."

The prophylactic measures generally employed against "catching cold" are not only accompanied by a directly opposite result, but they rather expose the organism to a much more serious danger than would be expected to result from disease consecutive to "catching cold."

Protection against diseases resulting from "catching cold" can solely be secured by developing the reactive capability to thermic irritants by appropriate exercise.—*The Dietetic and Hygienic Gazette.*

THE Board of the Sick Children's Hospital have decided to have a staff of house doctors of three, instead of only two, as formerly.

DR. E. W. GOODE, of King Street West, Toronto, has returned from New York after having passed a most creditable examination in one of the post-graduate institutions in that city.

The Physician's Library.

BOOK REVIEWS.

A System of Medicine by many Writers. Edited by THOMAS CLIFFORD ALLBUTT, M.A., M.D., LL.D., F.R.C.P., F.R.S., F.L.S., F.S.A., Regius Professor of Physic in the University of Cambridge, Fellow of Gouville and Caius College. Vol. II. London: Macmillan Co., Limited. New York: The Macmillan & Co., 1897. Toronto: A. P. Watts & Co., College Street.

Volume II of this exceptionally complete work includes Infectious Diseases, Intoxications, and Internal Parasites. The author has divided Infectious Diseases into two headings: 1st, Infective Diseases of Chronic Course; and 2nd, Diseases of Uncertain Bacteriology, the last part of the book being devoted to Infective Diseases communicable from animal to man in different forms. Under Infective Diseases of Chronic Course, Tuberculosis as written by Dr. Sidney Martin, Leprosy by Dr. Phineas Abraham, and Actinomycosis and Madura Foot by Dr. Acland, are considered. Diseases of Uncertain Bacteriology have been subdivided by the author into two headings: A, those diseases not endemic, and B, those which are topical or endemic. Under the first caption are Measles and Rubella, by Dr. Dawson Williams; Scarlet Fever and a chapter on the Coexistence of Infectious Diseases, by Dr. Caiger; Chicken-pox and Small-pox, by Dr. John MacCombre; Mumps and Whooping Cough, by Dr. Eustace Smith; and Constitutional System, by Dr. Jonathan Hutchison. Under heading B, those diseases which are topical or endemic, chapters are written by Sir Joseph Fayrer on The Climate and some of the Fevers of India; Typhus Fever, by Dr. J. W. Moore; Dengue, Beriberi and Sleeping Sickness, by Dr. Patrick Manson; Yellow Fever and Dysentery, by Dr. Andrew Davidson; Malta Fever, by Dr. Lane Notter; Epidemic Dropsy, by Dr. Kenneth Macleod; Oriental Sore, Verruga and Frambœsia, by Surgeon-Major Firth. Infective Diseases communicable from animals to man are divided into those of certain and those of uncertain Bacteriology. Under the first of these come Glanders (Farcy), by Dr. Sims Woodhead, and Anthrax, by Dr. John Henry Bell. Under those of uncertain Bacteriology are included Vaccinia, by Drs. T. D. Acland, M. Copeman, and the late Ernest Hart; Foot-and-Mouth Disease, by Prof. McFadyean; Rabies, by Sims Woodhead, and Glandular Fever, by Dr. Dawson Williams. The author has devoted a chapter by itself to diseases due to Protozoa, including under that title Malarial Fever by our own Osler; Hæmoglobinuric Fever, by Dr. M. Copeman, and Amœbic Dysentery, by Dr. Henri A. Lafleur. The section on Intoxications includes Ptomaine Poisoning, by Dr. Sidney Martin; Grain Poisoning and Mushroom Poisoning, by the author of the book himself; Snake Poisoning and Snake Bite, by Mr. C. J. Martin and Dr. Calmette; Alcoholism by Dr. Rolleston; Opium Poisoning by Dr. Allbutt, and Metallic and some other forms of Poisoning, including Poisoning trades, by Dr. T. Oliver. Under Internal Parasites come Psorospermosis, by Dr. Jossph Griffiths; Worms, by Dr. Patrick Manson; Bilharzia hæmatobia, by Dr. Guillemard; and Hydatid Disease, by Dr. Verco and Prof. E. C. Stirling. Perhaps the simplest and most concise manner in which to refer to this work, would be to say that for any physician to possess Allbutt's system would mean that he would have a set of books in which he could refer at once to any subject within a very wide range of medicine, and would secure without delay the latest information on many diseases and pathological conditions not found in other so-called systems of medicine which may be, perhaps, more voluminous, but less worthy of possession.

Schenk's Theory: *The Determination of Sex.* By Dr. Leopold Schenk, Professor at the Imperial and Royal University, and Director of the Embryological Institute of Vienna. Authorized translation. The Werner Co., Chicago; Akron, O., New York, 1898.

Dr. Leopold Schenk, the author, is a Professor at the Imperial and Royal University, and Director of the Embryological Institute in Vienna. He has devoted twenty years to the investigation of the subject, predetermination of sex, and has verified his theories again and again by painstaking and exhaustive experiments. The translation has been supervised by Doctor MacKellar, the well-known English medical literary authority. In view of the fact, say no less an authority than the *British Medical Journal*, that Prof. Schenk's conclusions as to the power of artificially determining the sex of offspring have served as a nine-days' wonder, it seems advisable to lay before our readers, it seems advisable to lay before our readers (the medical profession of England, Australia and India) a plain statement of his arguments. His treatise falls into three parts—a summary of the writings of his predecessors on the same subject, an account of his own researches and deductions, and finally a description of the method of treatment he has devised, with illustrative cases. "My discovery," explains Dr. Schenk, "is based upon the scientific fact that the blood of a grown-up man contains five million blood corpuscles, the bearers of life-giving and nourishing oxygen, whilst the blood of a grown-up woman only contains four million. This difference is the basis of the difference of sex, of the different moral and physical working powers in man and woman. This proportion is observable in the slightest quantity of blood from a man or a woman. All my efforts are directed toward producing the right number of blood corpuscles required by the male embryo. I have succeeded in attaining this effect by suitable nourishment of the woman." It is a well-known fact that for ages the secret of predetermining sex has eluded the grasp of science; that from remotest antiquity this question has engaged the attention of wise men and seers to no purpose. In view of the countless idle theories that have been advanced, many of which have seemed plausible and have had a temporary following only to prove delusive and without foundation, Dr. Schenk's discovery might be treated skeptically but that it comes to us on the authority of one of the leading medical lights of Europe; from Vienna, too, the recognized centre for advanced medical research of the whole world; that it is attracting the respectful attention of learned societies everywhere; that the *British Medical Journal* dignifies it with a lengthy review, tantamount to the endorsement of the profession in England; while the aristocracy of the Austrian capital, says a well-known correspondent, accepts the theory, and belief in it spreads with marvelous rapidity. Every day, he adds, the little street in which Prof. Schenk lives is crowded with elegant carriages from which ladies alight eager to consult the Doctor. Its simplicity cannot be accepted as an argument against the soundness of his theory. History teaches us over and over again that the so-called secrets of nature all lie near the surface. According to Dr. Schenk, it is an easy matter to determine the sex of children. The rules laid down are explicit and easily followed.

Annual and Analytical Cyclopedia of Practical Medicine. By Charles E. de M. Sajous, M.D., and one hundred associate editors, assisted by corresponding editors, collaborators and correspondents. Illustrated with chromo-lithographs, engravings, and maps. Volume I. Philadelphia, New York, Chicago: The F. A. Davis Company, Publishers, 1898.

We have been favored by the publishers with a copy of this magnificent work, for which we wish, herewith, to return our thanks. It is a handsomely-bound volume of 601 pages, printed in clear, legible type, on fine paper and, from the standpoint of typography alone, is an eminently attractive addition to a medical library. It also contains a number of chromo-lithographs and engravings which add materially to the interest of the articles. In this work the author and medical teacher have at their disposal not only the reviews of a

single year as before, but they will have those of practical value published during the last ten years. It is also arranged in such a way as to present scientific medical literature in an attractive and entertaining manner to the general practitioner, as it will describe all the general diseases mentioned in text books on practical subjects—medicine, surgery, therapeutics, obstetrics, etc. This, as is stated in the preface, will remove a source of dissatisfaction caused by the absence of general subjects in the older work. The general arrangement adopted will make it possible to cover the entire field in six volumes. Large type is used for the general text—that is to say, the description of a disease—and small type for the excerpts from journals. Either may thus be read separately. If, for instance, the reader desires to merely review the general subject, he has but to read the text in large type; if he wishes to analyze or study a disease, operative procedure, drug, etc., in which he is particularly interested, he has but to include the small type text in his perusal of the article. To facilitate the use of the work, the subjects have been arranged in alphabetical order, the references being given in full at the end of each abstract. The new Annual and Analytical Cyclopedia of Practical Medicine when completed will be a beautifully arranged medical reference library, in which the general practitioner can renew his past reading in the text books and learn all that the researches, studies, and experiments of the past ten years have done to throw fresh light on the subject matter of his quest. This work is eminently suited for the requirements of any physician or surgeon, enabling him to obtain accurate and full information on any professional question in which he may be interested. J. J. C.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynæcology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on Treatment and Drugs, by professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by JUDSON DALAND, M.D., University of Pennsylvania, Philadelphia; J. MITCHELL BRUCE, M.D., F.R.C.P. Lond., Eng.; and D. W. FINLAY, M.D., F.R.C.P. Volume I., Eighth Series, 1898. Philadelphia: J. B. Lippincott Co. Montreal: C. Roberts, 593A Cadieux Street.

Amongst the formidable-looking, but certainly influential array of contributors to this work are found the names of such men as Byron Bramwell, of Edinburgh; C. G. Cumston, of Tufts College; J. Abbott Cantrell, Professor of Diseases of the Skin in the Philadelphia Polyclinic; W. S. Davis, of Chicago Northwestern University Medical School; H. O. Walker, of Detroit College of Medicine; C. G. Stockton, of Buffalo University; Paul F. Mundé, of New York; J. M. Matthews, of Louisville; Alex. James, of Edinburgh, and many others.

The contents of Vol. I., eighth series, include Clinical Lectures on Drugs and Remedial Agents; Treatment; Medicine; Neurology, Surgery, Gynæcology, Ophthalmology, Laryngology, Rhinology and Dermatology. We have not often seen a work which shows such superior mechanical excellence. The type is large, easily read and well spaced, the paper is good, and the illustrations are all exceedingly clear and render the perusal of the lectures much more enjoyable and consequently add to the interest of the reader. The idea of the publishers in giving the profession the benefit of clinical lectures delivered by some of the "stars" in our calling was a most happy one. This volume is replete with articles, each one of which will prove of interest to the reader. The lecture on Contraindications to the use of Salicylate of Sodium in the visceral manifestations of acute inflammatory rheumatism, by Jacoud of Paris, is one the perusal of which will repay any one for expending the price of the book itself. Ballantyne's lecture on Placenta Praevia is also most readable and instructive, as also Dr. Love's chapter on Aneurism of the Abdominal Aorta. International Clinics, in other words, consist in each and every volume of a series of clinical lectures by "The Masters in Medicine," and are in no instance a rehash of any preceding

volume, but is composed of entirely new material. Purchase the work and thus be able to have the benefit of a post-graduate course right at home.

Conservative Gynecology and Electro-Therapeutics. A practical treatise on the diseases of women and their treatment by electricity. Third edition, revised, rewritten and greatly enlarged. By G. Betton Massey, M.D., Physisician to the Gynecologic Department of Howard Hospital, Philadelphia; late Electro-Therapeutist to the Infirmary for Nervous Diseases, Philadelphia; Fellow and ex-President of the American Electro-Therapeutic Association, of the Société Française d'Electrotherapie, of the American Medical Association, etc. Illustrated with twelve full-page original chromo-lithographic plates in twelve colors, numerous full-page original half-tone plates of photographs taken from nature, and many other engravings in the text. Royal octavo, 400 pages, extra cloth, beveled edges, $3.50 net. The F. A. Davis Co., Publishers, 1914-16 Cherry St., Philadelphia; 117 W. Forty-second St., New York City; 9 Lakeside Building, 218-220 S. Clark St., Chicago, Ill.

The author of this work, in preparing a third edition of his work on "Electricity in the Diseases of Women," found that in order to have it fully up to date it was absolutely necessary to so rewrite the chapters that the result was really an entirely new book. What was therefore originally a simple treatise on electricity, as applied to the treatment of fibroid tumors, has been converted into quite an extensive work on both the medical and surgical diseases of women and their treatment by electricity. The trouble with most of our books on this branch of medicine in the past has been that altogether too much attention has been given to the surgical side of the question, and far too little reference even made to what results can be accomplished by both faradism and galvanism. In this work, therefore, Dr. Massey has proceeded to point out particularly the benefit to be derived from the treatment of fibroid tumors by the Apostoli method, the result of his method for the treatment of cancer, as also a consideration of the neural disorders found most frequently in womankind. The author does not claim that his book covers the field filled by the larger works on abdominal surgery, but he justly considers that to the average all-round practitioner this book will prove of value, as treating more fully on the subject of electricity than is usual works on diseases of women. The publishers have kept up their record in turning out a book which, from a mechanical standpoint, is excellent.

Operative Gynecology. By Howard A. Kelly, A.B., M.D., Fellow of the American Gynecological Society; Professor of Gynecology and Obstetrics in the Johns Hopkins University; Gynecologist and Obstetrician to the Johns Hopkins Hospital, Baltimore; formerly Associate Professor of Obstetrics in the University of Pennsylvania; Corresponding Member of the Obstetrical and Gynecological Society of Paris, etc., etc. 24 plates, and 590 original illustrations. Volume II. Toronto: Geo. W. Morang, 63 Yonge Street, 1898.

Following very rapidly upon Volume I comes out Volume No. II of this magnificent work. For this the publishers must be thanked, as it is but human nature that a feeling of unrest must necessarily exist on the part of the reader of so celebrated a book as this is until he is in possession of the complete work. It is almost unnecessary that we should reiterate what we have said regarding the exceptional clearness of each and every one of the illustrations given. We again say that up to date they have never been excelled, and in few cases equalled. Volume II includes in its contents: The general principles and complications common to abdominal operations, the care of wound and patient up to recovery, the complications arising after abdominal operations, tubercular peritonitis, suspension of the uterus, conservative operation on the tubes and ovaries, simple salpingo, oophorectomy and salpingo, oophorectomy for adherent tubes and ovaries, vaginal drainage and enucleation for pyosalpinx,

ovarian abscess, tubo ovarian abscess and pelvic abscess; hysterectomy with extirpation of ovaries and tubes, abdominal hystero-salpingo, oophorectomy, ovariotomy, abdominal hysterectomy for carcinoma and sarcoma of the uterus, myomectomy, hystero-myomectomy, operations during pregnancy, Cæsarean section, extra-uterine pregnancy, the radical cure of hernia, intestinal complications, the more remote results of abdominal operations, on the conduct of autopsies, the making of protocols and the preservation of tissues for microscopic examination in gynecological practice. Among the plates deserving special mention are : a typical pyosalpinx, on page 209 ; epithelioma of the cervix, on page 309 ; angiomyoma of the uterus, with cystic degeneration, on page 382, and that of pregnancy in a rudimentary left uterine horn, on page 464. The chapter on vaginal drainage is one of the most complete and thoroughly interesting we have ever had the pleasure of perusing.

Diseases of Women. By George Ernest Herman, M.B.Lond., F.R.C.P. London : Cassell & Co.; Toronto : A. P. Watts & Co., 1898.

This is quite the most useful and practical book which has yet appeared upon that much written-up subject. The work is eminently the outcome of personal and large clinical experience. The reader is not confused by the many and various theories of conflicting authorities, but has set before him what the author has himself proved to be most beneficial in the treatment of the numerous diseases to which women are subject. The style of Dr. Herman calls back to memory the lectures of the late Matthew Duncan and the contempt for all humbug has evidently been acquired from that most eminent teacher and practitioner. The work is one to which the student or practitioner can turn at any moment, confident that he will find just what he requires, set before him in the plainest and shortest terms. The illustrations are numerous and show at once what they are intended to teach. The illustration and description of the way in which sutures should be introduced to repair a ruptured perinæum (page 718), makes that proceeding plain to the meanest comprehension. The same may be said of nearly all the illustrations and descriptions of operative work contained in this excellent book. It is, of course, impossible to point out a fraction of the valuable matter to be found in Dr. Herman's work, but attention may be called to the seventeenth chapter, which deals with parametritis and the diagnosis, etc., between this and other conditions. It is simply magnificent in its clear distinctions and is an education in itself. Many other chapters are equally excellent, but the above may stand as a type of the character of the author's teaching ability. Every practitioner, general or special, should read this book. The family doctor will find that in it, the so-called minor womanly ills about which he is so often consulted are fully described and sound advice given as to the best mode of dealing with them, while the specialist has clearly brought before him the latest and most helpful methods of operation and treatment. J.H.L.

Hay Fever and its Successful Treatment. By W. C. Hallopeter, A.M., M.D., Clinical Professor of Pediatrics in the Medico-Chirurgical College of Philadelphia ; Physician to the Methodist Episcopal Hospital ; Pediatrist to the Medico-Chirurgical Hospital and to St. Joseph's Hospital ; Fellow of the American Academy of Medicine, etc., etc. Philadelphia : P. Blackiston's Son & Co., 1012 Walnut St., 1898.

The author of this little book considered that after having had an experience of ten years' successful treatment of this distressing malady, he was in a position to give to his professional brethren the result of his investigations. Very properly so, as up till the present, though it has not been denied that hay fever was caused by the invasion of an external irritant or toxin of some kind into a debilitated system, thereby setting up an active state of inflammation of the Schneiderian mucous membrane, the treatment to be successful has been anything but specific in action. Dr. Hallopeter is therefore to be thanked for

throwing light on this aspect of the subject, as he undoubtedly has, showing that patients, who have been sufferers for many years from hay fever, may by a daily sterilization of the nares and post nasal spaces remain in the city all summer, notwithstanding the presence of dust and all other causes which formerly always brought on an acute attack.

Records of Urinary Examinations. A convenient, practical method for keeping records of urinary examinations for future reference in hospital or general practice. Arranged by HARRY MORELL, M.D., C.M., Trinity University, Toronto. Hartford, Conn. : J. B. Burr & Co., 1898.

It is with unusual pleasure that we take this opportunity of referring to a most useful and practical book recently compiled by our own student of but a few years ago, Dr. Harry Morell, now making his little pile at Slayton, Minnesota.

It consists of a series of records of urinary examinations, which will be unquestionably found useful by all physicians who wish to keep a record of their urine examinations. It is quite necessary nowadays, when such examinations have to be made daily in general practice, that a record of the cases be kept in the office, and we know of no more complete system than the one compiled by Dr. Morell. It is so arranged that a copy of each examination is kept, so that in future examinations for, say, albumen or sugar in the same patient, it can be easily determined whether such abnormal products are increasing or diminishing.

The Treatment of Choleraic Diarrhœa. St. Louis, Mo.: The Lambert Pharmacal Co., 1898.

This small book sets forth in a series of short articles the efficacy of Listerine in the treatment of several choleraic conditions. The articles are written by such men as Dr. A. B. Briggs, of Ashaway, R.I.; Dr. R. H. Goodier, of Hannibal, Mo.; Dr. W. J. Watson, of Philadelphia ; Dr. E. C. Register, of Charlotte, N.C.; Dr. I. N. Love, and others. The book is readable and will repay any physician for the trouble of sending for it.

Manual of Gynecology. By DR. CLARENCE J. WEBSTER, Edinburgh. Publishers : Young J. Pentland, Edinburgh. This work will be reviewed next month.

Masters of Medicine (series).—BENJAMIN BRODIE. By TIMOTHY HOLMES. WILLIAM STOKES. By SIR WILLIAM STOKES. Publishers : Longmans, Green & Co., New York. To be reviewed next month.

MAGAZINES RECEIVED.

Scribner's Magazine for August. The fiction number of *Scribner's Magazine* has been an institution for a decade. In it have appeared many notable short stories that have made their authors famous. It has also been the occasion for several novel and successful experiments in color-printing. This year the colored cover is one of the four prize designs by Albert Herter, and it is a brilliant example of decorative printing. The most ambitious scheme in color-printing undertaken by an American magazine is the reproduction of eight full-page designs by Henry McCarter, which accompany E. S. Martin's noble poem, "The Sea is His." The way in which the shading of color is attained is mechanically ingenious and artistically effective. It is a novelty in color-printing, even for experts. The war has necessarily crowded out some of the illustrated short stories. Richard Harding Davis continues his brilliant chapters of the war with an amusing description of the life at Tampa just before the

sailing of Gen. Shafter's expedition. He aptly calls it "The Rocking-Chair Period of the War." The contrasts of character seen on the piazzas of the Tampa Bay Hotel; the amusing differences of point-of-view among the troops from various States; indeed, all the romance and comedy of the impromptu army assembled at Tampa in May and June are depicted by Mr. Davis. Following the text very closely is a series of illustrations from photographs made by Dwight L. Elmendorf, which are not only realistic but artistic. Mr. Davis also sends a brilliant account of "The Landing of Shafter's Army," and the raising of the American flag. John R. Spears, who was present at the bombardment of San Juan, and under fire part of the time, has written, under the title "The Chase of Cervera," a picturesque and stirring narrative of the movements of Admiral Sampson's squadron from the sailing of the battleships Iowa and Indiana from Key West on May 4, to the trapping of Cervera's fleet by Hobson's daring exploit. His description of the San Juan bombardment is one of the best pieces of writing that the war has produced. Mr. Spears is an Annapolis man and a born sailor, as well as the historian of our navy, so that his war articles are of unusual authority.

The Sanitarian. Published monthly. The American News Co., New York, general agents. Price $4.00 a year; 35 cents a copy. The July number contains the following articles: "Home Sanitation," by Mrs. Esther A. Powell; "Malaria and the Cuban Campaign," by Charles E. de M. Sagons; "Don't Need Public Baths," by Mayor of Albany; "Vaccine Virus Circular of Information," by New York City Health Department; "Hygiene of the Teeth," by Clement B. Low; "Medical Excerpt," by T. P. Corhally, A.M., M.D.; "Medals, Jetons and Tokens"; "Illustration of Sanitation," etc., by H. R. Storer.

PAMPHLETS RECEIVED.

"Twenty-fourth Annual Report of the Secretary of the State Board of Health of the State of Michigan for the fiscal year ending June 30th, 1896. Lansing, Mich., 1897."

"Proceedings and addresses at a Sanitary Convention held at Detroit, Mich., December 9 and 10, 1897, under the direction of a committee of the State Board of Health, and a committee of citizens of Detroit. By authority. Lansing, Michigan, 1898."

The partnership hitherto existing between Presley Blakiston and Kenneth M. Blakiston, under the firm name of P. Blakiston, Son & Co., Philadelphia, expired June 30, 1898, on account of the death of the senior member. The business of publishing, importing, and dealing in medical and scientific books, as established in 1843, will be continued by Kenneth M. Blakiston, trading as P. Blakiston's Son & Co.

ASEPTIC VACCINATION.

In recent issues of the *British Medical Journal* the question of aseptic vaccination has been raised by several correspondents, who describe their procedures in carrying out this practice. These, briefly summarized, amount to antiseptic cleansing of the arms to be operated on, and of all instruments, and then to the application of some preparation such as a gelatine film or gauze dressing which shall protect the vaccinated person from the introduction by means of the punctures or scarifications made, of septic or other noxious

organisms. We fear that it must be admitted at the outset that whilst this country took the lead in antiseptic surgery, there has been far too much carelessness in the matter when the comparatively minor surgical operation of vaccination has been in question, and this, notwithstanding the fact that the extreme infancy of the subjects operated on has added to the risk. The performance of vaccination without a preliminary cleansing of the operator's hands or cleansing of the infant's arm is by no means uncommon; the instruments used are, we fear, but rarely sterilized, and we, at times, hear complaints that they are not even carefully washed between different operations when more than one is performed at the same time. The official instructions to public vaccinators must be regarded as out of date in this respect, although it must be remembered that so far as the Government is concerned the whole question of vaccination is under consideration, and that piecemeal modifications and amendments are not to be desired. But whilst we are fully convinced of the great importance by the performance of vaccination under aseptic conditions, we can hardly admit that much mischief has resulted from the actual operation. The erysipelas and other allied inflammations which are apt to supervene on vaccination, and which are especially fatal by reason of the very tender age of the subjects, rarely, if ever, come on until the second week; and making all allowance for the postponement in infection that may be due to the concurrent action of two different poisons, it seems clear that erysipelas, if it were received into the system at or about the time of the actual operation of vaccination, could not be so invariably postponed in its first manifestations as it is. On the contrary, the obvious results of the infection would make themselves apparent within a very few days. Post-vaccinal erysipelas is nearly always contracted during the second week. It may be partly due to infection in dirty and unhealthy houses after vesicles have been intentionally opened, but it far more frequently follows ruptures and abrasions of the vesicles as the result of careless handling in poorhouses where infants are necessarily to a great extent uncared for. But this fact in no way relieves the operator from the duty of using all reasonable antiseptic methods; it rather adds to his duty that of advising and, if he can, of carrying out similar precautions during the time when the vesicles are liable to be broken. We regret to admit that in this country we are not so far advanced as many of our Continental brethren, for it is no uncommon thing in foreign countries to see every precaution by way of cleansings, antiseptics, and even the use of a sterilized dress, which are everywhere deemed necessary for the performance of ordinary surgical operations. Clearly there is room for improvement and progress in this direction, and we are sure that public and other vaccinators will be glad to know the precise methods which are best adapted to effect the end in view, but which are not prohibitory in ordinary general practice. — *Dietetic and Hygienic Gazette.*

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THE TREATMENT OF CONVALESCENT CLUB-FOOT.*

BY V. P. GIBNEY, M.D., NEW YORK.

MR. PRESIDENT AND GENTLEMEN OF THE ASSOCIATION,—I take this opportunity to thank you for the honor conferred upon me. It will afford an opportunity, I trust, for the discussion of a subject which I know must be of interest to all practitioners.

Permit me to thank your Secretary for his courteous invitation to present a paper on this occasion, and to take part as a guest in the proceedings of a body so well known for its excellent scientific work.

Among the deformities the Orthopedic surgeon is called upon to treat, there is no one of these more interesting than club foot, and, I may say without fear of contradiction, no one more difficult of conducting to a successful issue. A discussion, therefore, is timely, and should lead to a better understanding of the underlying causes and conditions that make the different methods of treatment at times so unsatisfactory. These changes in the bones of the tarsus, the shifting of articular facets, taken in connection with osseous development should be understood by all who make any attempts at restoration of the clubbed foot, and he who looks sneeringly upon these anatomical changes, relying upon a "radical cure," which he has heard expounded by a recognized authority, will find that the road to cure is not always a royal one. He will also find

* A Paper read before the Canadian Medical Association at its annual meeting in Quebec August, 1898.

that the accomplishment of a cure and the maintenance of the cure are altogether different.

I want to dwell, therefore, on these underlying principles in the Pathology and the pathogeny, in order to have my hearers realize the great difficulty in the way of maintaining a correct position of the foot once it has been restored.

The terms in my title have been chosen advisedly, and a definition of the same will enable us to better understand the subject under discussion.

By "treatment" I want you to know that more than "management" is understood. When we leave the care of a case to the family we tacitly admit that nothing further is required of us, and that the good results we have secured will be lasting, relying on ordinary lay common sense to conduct the case through the convalescence, however tardy this may be. In club-foot especially something more than family co-operation is required after the deformity has been corrected. Both management, by which I mean "line upon line, precept upon precept," and remedial measures, are called into requisition if we mean to have our good results permanent.

By "convalescence" we understand that period of time between a cure and a final restoration to perfect health. In club-foot, for instance, we mean the stage between the time the doctor has pronounced the deformity fully overcome, and the time when all concern about the shoes and other retentive appliances may be abandoned. It is just this stage or period to which I wish to invite your attention to-day. The kind of club-foot I am discussing is the kind with which you are all most familiar, viz., equino-varus, dating from birth, congenital. If time permits I shall allow myself to include in the discussion some of the acquired forms such as paralytic valgus, calcaneus and cavus.

Before passing to the treatment proper I may as well forestall by answering a question which may be propounded. Why treat anything that is convalescing? Does not the term convalescing mean that treatment is at an end, and that a cure is already an accomplished fact?

If we had no such terms in our vocabulary as "relapsing club-foot," "inveterate club-foot," and the like, the question would admit of but one answer. I can appeal to the members of the Association, who have been in practice from ten to twenty-five years, to uphold me in the statement that cases which at one time have been regarded as cured have relapsed, and that the latter condition is far worse ofttimes than the former. In other words, all of us feel that a deformed foot which has once been cured and become deformed again is a very difficult case to manage.

Let us see why relapse occurs—why the foot does not remain straight—especially in children who are old enough to understand the necessity of a correct gait.

Among the causes may be mentioned—a failure on the part of the surgeon to effect perfect reposition. He may not have grasped

the situation, may not recall to mind the anatomy of the normal foot—the relation of the astragalus to the inner facets of the malleoli to the facets of the metatarsal bones—the size relatively of the scaphoid and the cuboid—the shape of the necks and heads of the bones mentioned. Let me show you these bones, their shape and the articulating facets. (Here demonstrate a normal foot, also by way of comparison a club-foot.) He may have failed to realize the normal development of bone, its density, etc., etc. I do not mean that it is necessary for the surgeon to carry in his mind all the facts—the size of the articulating facets, the length and direction of the neck of the astragalus, the length of the os calcis—but I do claim that he should recognize the fact that changes have occurred, and that as a consequence changes in muscle, tendon and fascia have taken place. Once bearing in mind the possibilities and the probabilities, he must consider the absolute necessity of replacing all these subluxated bones, the lengthening of shortened or contracted muscles, tendons and fascia—the shortening of lengthened tendons and fascia.

Once in possession of all this data his work can go on intelligibly and he will not rest content until a restoration, in the full sense of the term, shall have been accomplished.

By relapsing club-foot one is to understand not necessarily a complete return to the original deformity, but an incomplete cure, or at least a slight change for the worse. We fail sometimes to recognize this condition, believing that all is going well. The patient toes in a good deal, and rolls toward the outer side of the foot. The shoe will be worn off along the outer border. The behavior of the shoe, for instance, is enough often to determine that a relapse is going on. Why, then, should a relapse occur? This is simple enough. In the first place, the cure may not have been complete; the displaced bones may not have been held long enough in position for the redevelopment of the normal facets. We are content with present appearances and are often content to get quick results. Again, in effecting a correction of a deformed foot, whether by manual force repeated from day to day, or by apparatus whose tendency is to correct, or whether by immediate reposition under an anæsthetic, we fail often to fully stretch the shortened tendon, fascia or ligament. We fail when operation is done to completely sever all opposing structures. In other words, we do not bear in mind that we must over-correct if we expect to maintain good position. I have long since made it a rule in correcting rhachitic deformities, such as bow-legs, knock-knees, etc., to over-correct at the time of operation. I do not believe now that I have ever regretted such a procedure, especially in club-foot. It is good, therefore, to bring about over-correction. I am free to confess that in one or two instances that have come under my observation, over-correction has been maintained too long, so that I wish here to enter a slight protest against too long maintenance of the over-corrected position. The surgeon himself must be the judge in this matter. He can decide just how long he shall maintain this

position, and in order to decide intelligibly he must have an opportunity for repeated observations. In our own city, to which patients come from all distances in quest of advice and treatment, it is very difficult to have the opportunity of repeated examinations, for the reason that the expenses are great and the patients themselves feel that they must get home, so that after all it devolves in a great measure upon the family practitioner, to whom we must all look for co-operation. Again, after the appliance has been worn sufficiently long the development of the muscles is of the greatest consideration. We are taught to think lightly often of the paralytic theory in the causation of club-foot, especially where the deformity is congenital. You must all recognize that the muscles are small, even if not palsied, and our aim should be to bring about as full development as possible if we expect to maintain good results. I may say, therefore, that the failure to develop muscles after the cure of the club-foot is one of the causes of relapse. Another cause is complicated apparatus.

The club-foot shoe that needs constant repairs, that easily gets out of order, and that an ordinary smith in any town cannot easily repair, is certainly objectionable. The appliance in the first place should fit well. It should be easy of application, and it certainly does require the close attention of the surgeon in charge of the case. It will not do to leave this to an instrument-maker. The doctor himself usually ought to know what indications he aims to meet, and whether the apparatus in question meets these indications. He only is competent to judge from time to time whether alterations and repairs are necessary.

The charge is sometimes flippantly made by the general practitioner that the surgeon who practises a specialty is loath to discontinue treatment in a case. In other words, that he is prompted by mercenary motives to continue a case too long under observation. It is not my purpose to answer any charge of this kind, but I merely bring it up in the course of my remarks, and desire to say this much: that in a large proportion of chronic diseases and deformities it is absolutely necessary to continue one's observation throughout the period of convalescence, however long this may be, and the best ultimate results are obtained by men who hold zealously to this principle. When a cure is regarded as complete it is necessary to impress upon the family or the patient certain instructions about the gait, the shoe that is to be worn, etc. It is well at all times to let the patient understand that the deformity is a chronic one, that certain changes must be brought about before a cure may be regarded as permanent, and that a great deal of assistance can be rendered by the patient himself. The different methods of treatment are as follows: first, daily manipulation, which must be taught the family, and assurance that the family has been taught. It is all well enough to say, "Work the foot and twist it from day to day." The father or mother or nurse should be taught just how to twist it; should

be taught the functions of the foot, and the surgeon should see that these instructions are carried out. The shoe itself should be raised along the outer border of the sole so as to throw the weight on the inner border, which in the normal foot is the weakest part. The construction of a shoe after this pattern is sometimes rather difficult, but the shoemaker himself can be taught just how to build the shoe, what to do to the sole, how much thickness—in fact, all the details of its construction.

The mere turning in of the toe, or pigeon toe, is not an insurmountable deformity, nor is it one that need cause much anxiety. We often must wait until the child is old enough to develop some pride in walking, and the mother herself can be shown just how to make the child walk. She can have the child practice this walking several times a day. If the pigeon toe persists after these instructions, then the sole of the shoe at the toe on its outer border can be raised fully three-eighths of an inch. If obstructions exist, such as shortened fascia, shortened tendons, elongated neck of the astragalus, then it is well to remove these obstructions. Do not hesitate to divide tendons or fascia quite freely, not necessarily openly, because most of these operations can be done better by the inexperienced surgeon subcutaneously; after division, however, over-correct and apply plaster-of-paris. The plaster should not be removed for at least two or three weeks, if it is found that the foot is inclined to relapse; reapply the plaster, incorporate in the plaster, along the plantar surface of the foot, a bit of board, so that the child can walk on this without disturbing the efficiency of the plaster dressing. I have found it necessary, in some instances, to continue the plaster for at least six months. Generally about three months.

If one is at all familiar with the use of water glass, a much lighter dressing can be made, and a dressing that requires a less closer shoe thereover.

The open operations are, removal of the head of the astragalus, a cuneiform osteotomy through the proximal end of the os calcis, and it is astonishing how readily the parts heal after an aseptic operation on these bones. The indications for removal of the head are failure to bring the foot past a right angle, and the prominence of the head of the astragalus. Of course, it is well to divide the tendo-Achilles, plantar fascia, and to attempt over-correction before this operation is resorted to. The indications for operation on the os calcis are, a persisting varus, an undue prominence of the cuboid and the proximal end of the fifth metatarsal. These small bony prominences do give an immense amount of trouble to patients convalescing from club-foot. They require the greatest care in the fitting of boots or braces, and when one fails to correct them by milder means, there is nothing quite so good as a cuneiform osteotomy of the os calcis, about one-half inch from its distal end. Where none of these indications exist, and where the foot simply rolls to the outer side, it is very often necessary to

do a supra-malleolar osteotomy, which can be done subcutaneously, and which results most happily. I have done this operation a few times, without any occasion to regret having done so. It is efficient, and I feel sure then that there will be no relapse, because I can put my fractured tibia in just the position I want it, to maintain the good position.

In conclusion, I wish to dwell upon, first, the over-correction of a deformity before the cure is regarded as complete. Second, the maintenance of this over-correction a reasonable length of time, say from eight to twelve weeks. Third, the employment of simple and uncomplicated apparatus. Fourth, the daily manipulation of the foot. Fifth, the development of the muscles after the deformity has been corrected. Sixth, the opportunity for an occasional observation, extending over many months. Seventh, the superintendence of the construction of shoes which are intended to throw the weight of the body along the inner border of the foot, and to assist in eversion. Eighth, the resort to bone operations when simpler measures fail.

THE TREATMENT OF DIPHTHERIA AT THE CHILDREN'S HOSPITAL, PARIS, AND THE ISOLATION HOSPITAL, TORONTO.*

BY J. J. CASSIDY, M.D., TORONTO, ONT.

A COMPARISON of the results obtained in the treatment of cases of diphtheria at the Children's Hospital, Paris, and the Isolation Hospital, Toronto, during 1897, will probably be interesting to practitioners in Ontario. The Parisian statistics were presented by Dr. Sevestre, president of the Medical Society of the Hospitals, at a meeting of his society on May 1st, 1898, a report of which appeared in *La France Medicale* of May 6th. The report shows that the use of Roux's serum continues to give excellent results. The more serious cases of diphtheria, or those which receive the serum treatment at a late stage in the disease, are now sent to the Children's Hospital, so that Dr. Sevestre's statistics refer to cases of a graver character than those treated with serum when this treatment was begun in 1894.

Of 580 cases of diphtheria treated at the Children's Hospital in 1897, 101 perished, or a total mortality of 17.40 per cent. Forty-three of these children died inside of the first twenty-four hours, so that, if their deaths are not counted, the mortality would be 10.80 per cent. Dr. Sevestre states that in strepto-diphtheria the mortality is always three times higher than in the non-associated forms of the disease. All the patients received a dose of the Roux serum immediately after their entrance into the hospital, the dose being

* Read at the Third Quarterly Meeting of the Provincial Board of Health and adopted.

regulated by the gravity of the disease, age of the patient and the parts of the body affected. Children ranging from two to three years of age received a medium dose of 20 c.c. of serum. Dr. Sevestre insists on the free irrigation of the throat and nose, generally using Labarraque's solution of the strength of 50 parts to 1,000 of water, and in grave cases, a 1 per cent. solution of chloral, which is more active, though not so well borne by the patients.

There were 331 cases of croup, most of which were in a rather advanced stage when received, and most of these patients required intubation. Good results were obtained from cold applications to the thorax, at the first threatening signs of an attack of suffocation. Frequently this treatment enabled the attendant to delay and sometimes to omit an operation.

In 203 children intubation was practised, and of these 48 died, giving a total mortality of 19.70 per cent. Twenty-one of these children died in less than twenty-four hours after entrance, which gives a reduced mortality of 11.41 per cent. This result is altogether due to serum therapy, associated with intubation. Intubation has the great advantage over tracheotomy of permitting the use of cold baths, a special treatment which, in Dr. Sevestre's opinion, has enabled him to increase the percentage of cures of broncho-pneumonia supervening in diphtheria.

In regard to the fatality claimed to arise from strepto-diphtheria, E. B. Shuttleworth, F.C.S., bacteriologist of the Toronto Local Board of Health, publishes a statistic for 1897, which shows that the bacillus diphtheriæ associated with the streptococcus produces the greatest proportion of fatal cases in Toronto. A larger percentage of fatal cases is also reported when the bacillus diphtheriæ is associated with the staphylococcus, or with streptococcus and staphylococcus, than in cases in which the bacillus diphtheriæ is the sole organism present. Mr. Shuttleworth's statistics are as follows:

ORGANISMS IN CULTURES COMPARED WITH CLINICAL RESULTS, 1895-6-7, WITH AVERAGES.

ORGANISMS PRESENT.	TYPE OF DISEASE.															
	Mild.				Severe.				Very Severe.				Fatal.			
	'95	'96	'97	Av.	'95.	'96.	'97.	Av.	'95.	'96.	'97.	Av.	'95.	'96.	'97.	Av.
B. Diphtheriæ....	46.6	47.9	50.6	48.4	11.2	14.0	8.3	11.2	22.5	12.1	14.9	16.5	19.3	16.9	25.9	20.7
" and staphy....	32.1	50.7	67.4	50.0	17.8	13.0	6.0	12.2	21.4	17.9	15.6	18.3	28.5	17.4	22.9	22.9
" and strep.....	27.2	32.1	23.8	27.7	18.1	14.3	9.5	13.9	22.7	32.1	28.5	27.7	31.8	21.4	38.1	30.4
" staph. & strep.	54.3	60.0	40.9	51.7	11.4	20.0	9.0	13.5	20.0	15.0	..	11.6	14.2	5.0	50.0	30.1
Staphylococci.....	97.3	100.0	100.0	99.1	2.7	..	..	..	..	..	..	..	..	..	..	.
Streptococci.....	100.0	100.0	100.0	100.0	..	..	..	..	..	..	..	..	..	..	..	..
Staphy. and strep.	100.0	100.0	100.0	100.0	..	..	..	..	..	..	..	..	..	..	..	..

Dr. Tweedie, medical superintendent of the Toronto Isolation Hospital, reports that during the year 1897, 431 cases of verified diphtheria were treated in that institution, with a mortality of 79, or 18.32 per cent. Eleven moribund cases were admitted, which, being subtracted from the total mortality, would leave 68 deaths, or a mortality of 15.77 per cent.

During the year antitoxin was employed in a few cases—15 in all. It was used, not as a substitute for but as a supplement to the ordinary treatment. Since November 16th, 1894, when the first hospital patient was so treated, 48 patients have had antitoxin administered to them by various physicians. The recoveries were 34 and the deaths 14, or a mortality of 29.16 per cent. During the same period, and including the antitoxin cases, 1191 diphtheria patients were dealt with in the Isolation Hospital. The deaths numbered 194, and of these 37 were moribund when brought to the hospital, which shows a death rate during the period referred to of 16.20 per cent., and if we exclude the moribund cases, 13.18 per cent.

Compared with the mortality in cities, in which the treatment of diphtheria used to be similar to that now pursued at the Toronto Isolation Hospital, the mortality rate for that institution is rather low. For instance, at the Buda-Pesth International Congress of Hygiene and Demography, in 1894, Dr. Roux reported that for 1890, '91, '92, '93 the mean mortality from diphtheria at the Children's Hospital, Paris, was 51.71 per cent. Prior to the introduction of anti-diphtheric serum, the mortality from diphtheria at the Harper Hospital, Detroit, averaged for a number of years 40 per cent. When viewed in the light of these antiquated, pre-antitoxin mortality rates, the corrected Toronto mortality rate from diphtheria for 1897—15.77—is decidedly low. Viewed in the light of the statistics of the Paris Children's Hospital for 1897, in which we find it recorded that serum therapy has changed a death rate of 51.71 per cent. to 10.80 per cent., the mortality of the Toronto Isolation Hospital is not only not low but rather high. To judge the matter fairly, we place the figures in juxtaposition:

1897.	Cases of Diphtheria	Mortality.	Per cent. of Mortality.	Moribund.	Corrected per cent. of Mortality.
Toronto Isolation Hospital	431	79	18.32	11	15.77
Paris Children's Hospital.....	580	101	17.40	43	10.80

Reasoning by analogy, we see no reason why the Toronto Isolation Hospital could not show a mortality rate for diphtheria not only less than that which has been recorded for Paris in 1897, but as low or even lower than the mortality obtained at the Harper Hospital, Detroit, during 1897. The statistic of the latter is as follows:

HARPER HOSPITAL, DETROIT.

	Cases.		Deaths.
Ordinary Diphtheria	115	....	1
Laryngeal Diphtheria	26	....	6
	141		7
Excluding two cases moribund on admission...	2	....	2
	139	....	5

Mortality under antitoxin treatment, 3.6 per cent.

Would it not be wise, therefore, for the medical superintendent of the Toronto Isolation Hospital to recognise the great advance that has been made in the saving of life during the last four years by improved methods of treating diphtheria and to govern himself accordingly? It may be that the Toronto children possess a greater power of resistance than that possessed by the average Parisian child. If it were not so, it would be difficult to explain why the present mortality in the Toronto Isolation Hospital does not equal that, which used to prevail in the Children's Hospital, Paris, four years ago, prior to the introduction of serum therapy.

It is not necessary to discuss here the ordinary chemical treatment of diphtheria, for it is much the same in Paris as in Toronto. Assuming, therefore, for the sake of argument, that Toronto children do really possess a greater power of resistance to diphtheria than the Parisian children, they have, in addition, a right to receive from the officials of the Local Board of Health all the assistance that medical art can give in resisting the attacks of this destructive plague. With a little goodwill and the systematic use of the diphtheria antitoxic serum the mortality from diphtheria for 1899 at the Toronto Isolation Hospital ought to bear the same proportion to its recorded mortality for 1897—15.77 per cent.—that the mortality for 1897 at the Paris Children's Hospital—10.80 per cent.—bears to 51.71 per cent., the old mortality rate in Paris prior to 1894. This would mean that the future mortality rate of the Toronto Isolation Hospital ought to be 3.29 per cent. It is an object worth striving for.

ADDRESS IN GYNÆCOLOGY.*

BY T. K. HOLMES, M.D., CHATHAM, ONT.

GENTLEMEN,—The distinction conferred by your invitation to me to lead in the discussion in gynæcology on this occasion is highly appreciated, and I am sure it is intended as a compliment to western medical men rather than as indicating any particular qualification on my part for the performance of so important a duty.

* Read at the Ontario Medical Association Meeting, Toronto, June, 1898.

The great prevalence of uterine cancer, its painful course, and its fatal character are sufficient incentives to the careful study of the disease, and recent observation and a scientific study of its nature, together with improved methods of treatment warrant a much more hopeful view of many cases than was formerly held. The Committee on Papers could probably have chosen no subject more worthy of discussion by this Association, or one fraught with more importance to those who seek our advice than the one under consideration now, and we may indulge the hope that the discussion to-day may add something to the general stock of knowledge of this disease, or may at least disseminate more widely what is already known.

Accepting statistics that have been compiled by Dr. Park, we may safely say that more than three thousand persons die annually in this country from cancer of the uterus. Williams found that for every hundred males dying of cancer there were two hundred and twenty-three females, and that of these the disease attacks the breast in forty per cent., the uterus in thirty-four per cent., and other parts of the body in twenty-six per cent. of the cases. Various theories have been advanced to account for the origin of cancerous growths, but uncertainty as to the etiology still surrounds the subject, and further investigation is necessary before any of these theories can be accepted as entirely satisfactory. The parasitic and the embryonal may be mentioned as the most generally accepted theories, and there are numerous facts to support each as factors, but their consideration may be more conveniently left to those who may participate in this discussion. Trauma, it may be safely affirmed, is a common cause of epithelioma of the uterus, and in this connection laceration of the cervix from childbirth occupies first place. Emmet states that he has never seen epithelioma of the cervix in a woman who has not had a child or has not had a miscarriage, and my own observation and experience, extending over thirty-one years, coincide with his statement in this respect. Compared with cancer beginning in the cervix carcinoma of the body of the uterus or of the endometrium is rare. In my own experience ninety-five per cent. have originated in the cervix and have invariably commenced in an unhealed laceration. I have never known cancer to attack a cervix that has been repaired after a laceration, and my observation in this respect embraces six hundred cases, and extends over a period of eighteen years.

Great credit is due those whose research and skill have done so much to improve methods of treatment. Their labors have reduced the mortality and are saving numberless lives every year, but far greater saving of life and of suffering could be accomplished if means could be adopted to prevent laceration of the cervix during childbirth, or, failing this, to recognize this lesion and repair it before malignancy becomes established. I believe it would be a wise routine practice to keep every woman that bears a child under observation for several months, and if those symptoms

characteristic of this injury be present, to make such investigation as may be necessary to determine its existence and have any unhealed tear cured. If this were done epithelioma of the uterus would be a very rare affection, and more would be accomplished in the saving of life than at present results from all known means of curing this disease after it has become established. The diagnosis, when the affection is confined to the cervical tissue, is generally easy. The age of the patient, the presence of menorrhagia, the character of the discharge, and the general appearance of the patient, all aid in arousing the physician's suspicions. If on examination there be still doubt as to the nature of the disease, the microscope may enable a certain conclusion to be reached. If the disease be located in the endometrium the curette should be used to remove some of the tissue for microscopic examination. Dr. Cullen's method of preparing such scrapings by hardening them in formalin is a most valuable aid in diagnosis. Metastatic deposits rarely occur in uterine cancer, the tendency being to spread laterally to the pelvic and to the retro-peritoneal glands.

In ten autopsies on inoperable cases Russell found metastasis in only one. In four of these cases cancerous deposits were found in the pelvic and retro-peritoneal glands, and in five cases no metastatic deposits could be found anywhere. In 37 cases operated on, he found that 10 per cent. died from the operation, 38 per cent. from recurrence, 5 per cent. were not heard from, and 43.2 per cent. were alive after from one to five years. It is well known that complete removal of all tissue containing cancer cells, in whatever part of the body the disease may be, results in cure, and this is true of uterine cancer. Any mode of treatment that does not accomplish this can only be considered as palliative, and it is because so few cases are seen sufficiently early to admit of this complete removal that the mortality is so high.

The treatment may, for convenience, be considered under two heads, palliative and radical. If the uterus be fixed in the pelvis by involvement of periuterine tissue, or if the bladder or the rectum, or both, be involved, a radical cure cannot be effected, and one's efforts must be directed to the prolongation of life and to the relief of suffering. Removal of diseased tissue by means of the knife, scissors, or curette, followed by the use of the thermo-cautery, checks hæmorrhage, arrests the offensive discharge and often results in great temporary benefit to the patient. Lotions containing permanganate of potash, formaline, carbolic acid or other disinfectant, or deodorant add much to the patient's comfort. Opiates are the only reliable remedy for the pain, and they should not be withheld. In endeavoring to effect a radical cure, high amputation of the cervix and hysterectomy are the operations resorted to. If the case be seen very early, and if the disease be confined to the cervix amputation may succeed, but it is difficult and often impossible to determine when these favorable conditions are present, because the tendency to spread laterally and to involve the broad ligaments

and pelvic glands has been proved by all observers. The complete removal of the uterus must therefore generally be the operation of choice, and it has now been performed so often and with results so satisfactory that its utility in properly selected cases is unquestionable. There is much difference of opinion as to the best method of its performance. The vaginal method has the advantage of being more quickly and more easily performed, and if one could be sure that the tissues outside of the uterus are free from cancerous infiltration, it should be the mode of election. Of this, however, it is impossible ever to be certain, and therefore the abdominal route will, I believe, grow in favor among the best surgeons. I have several times seen cases in which the disease seemed in so early a stage that its complete removal by vaginal hysterectomy scarcely admitted of doubt, and in which I have performed this operation, and yet in these promising cases recurrence within a short time convinced me that it is unsafe in many cases to trust to slight involvment of the cervix as a guarantee that surrounding tissues are free. Every surgeon knows the futility of the removal of a cancerous breast without dissecting out all axillary glands, even when these are normal in size and appearance. I believe the same rule should be observed in cancer of the uterus, and that not only the adnexa but the pelvic glands should be extirpated. This can only be done by opening the abdomen and making a careful and thorough dissection. It is a tedious procedure, and although the liability to shock may be greater, the ultimate result will be more satisfactory.

Any reference to the technique of hysterectomy is unnecessary, because this is dealt with in the numerous works on the subject. I cannot refrain, however, from mentioning an illustrated article in the February and March number of the *Bulletin* of the Johns Hopkins Hospital, by Dr. J. G. Clarke, in which the various steps in the radical extirpation of the uterus and infected glands through the abdominal route is well presented. I believe the illustration in this article is one of a series prepared expressly for Dr. Kelly's book on operative gynæcology, and I have no doubt it will be reproduced in the forthcoming second volume of that admirable work.

I shall only add that in vaginal hysterectomy I have found the use of the clamp so easy and so satisfactory that I prefer it to ligatures for the vessels of the broad ligament, and in abdominal hysterectomy a shaded incandescent light is a very great aid in operating, and should always be available.

I am sure I have saved some patients by transfusing normal salt solution into the areolar tissue beneath the breast when failure of the circulation has threatened, and its use should not be deferred until collapse is imminent, because about twenty minutes elapse before its beneficial effect is appreciable.

Selected Articles.

THE ELEMENTS OF ELECTRICITY IN MEDICINE.

BY PHILIP MEIROWITZ, M.D.
Instructor in Nervous and Mental Diseases, N. Y. Post-Graduate School and Hospital.

For the past three years during my course of lectures at the New York Post-Graduate School and Hospital, I have been frequently requested by physicians attending the course, to devote a portion of my time to a brief exposition of electricity as utilized in the diagnosis and treatment of nervous and other affections. These requests had reference more to galvanism and faradism, less to franklinism or static electricity. Talks with many general practitioners on the subject of the employment of electricity have revealed the fact that the subject presents something mysterious and that the elementary principles are not clearly understood. This doubtless is owing to the fact that the teaching of the use of electricity in the Medical Schools is defective or insufficient, or that no attention is given to the subject, the students being sent forth, ignorant of its advantages as a diagnostic and therapeutic aid, to learn for themselves after the loss of valuable time and possibly the loss of patients through ignorance of its limitations.

It has appeared to me therefore that a concise exposition of the subject would not be untimely.

Apparatus to be employed. The implements necessary for the complete and thorough examination or treatment of a case of nervous disease are the following:

1. A galvanic battery producing a constant current.
2. Conducting cords or rheophores and electrodes.
3. A milliamperemeter.
4. A rheostat.
5. A faradic apparatus giving an induced interrupted current.

The Galvanic Battery. A large variety of galvanic batteries has been placed upon the market and the physician is often at a loss which form of apparatus to select. By far the largest part of the electrical work will be done in the office; hence an apparatus is necessary which will deliver an even current for a number of hours at a time and which will require but little or no attention on the part of the physician. This statement refers primarily to the cells or elements of the battery which are the source of the electric current. The cell, as every one is aware, is composed of

two elements, as zinc and carbon, dipped in a chemical solution which acts upon them and which is contained in a suitable receptacle or vessel. For constant office work a cell is required which does not necessitate the frequent renewal of the chemical solution nor the withdrawal of the zinc element from the latter to prevent its rapid corrosion.

The cell which answers these purposes best is the A.X.O. cell which will retain its activity for about a year and in which the elements can be renewed with but slight cost. The number of such cells for an efficient battery is about forty. As they are rather bulky they are not transportable and cannot be taken to the house of the patient. For the latter purpose a small and compact battery has been constructed, which is admirable for transporting, but which will be found to be a source of much annoyance if employed constantly in the office. This is due to the fact that the elements of the cell, which is small, must be raised out of the chemical liquid each time after using. A quantity of the chemical liquid adheres to the elements and in drying deposits the salts which it contains in solution. In a very short time a thick incrustation is formed which interferes very markedly with the action of the battery. Another serious objection to portable batteries for constant office work is the rapid evaporation of the chemical fluid. There is nothing more exasperating when desiring to examine or treat a patient with electricity than to find that the current does not flow on account of either incrustation of the elements or evaporation of fluid in the cells.

For several reasons it is not desirable when using the battery to employ at each sitting all of the forty cells. Firstly, because the amount of current generally employed can be secured from fewer cells; secondly, because when the entire battery is employed, the energy developed in a number of the cells is practically wasted. As this energy is the result of chemical action, it represents a certain loss in the elements of the cells. To enable the physician to employ any number of cells that he may desire, the key-boards of the batteries sold by the makers are supplied with a device consisting of metallic buttons, arranged in a single circle or in two arcs of a circle and rotating arms, the free ends of which can be brought successively in contact with each of the buttons. These are termed the selectors or switches.

During the past four years I have employed half a dozen different varieties of galvanic batteries; the last of these is the apparatus manufactured by the Jerome Kidder Co., of New York. This cabinet has given me eminent satisfaction. Its chief characteristic is its ingenious simplicity. The cells, which number forty, are arranged in groups of five; each group has its corresponding button on the key-board, with the former of which it is connected. By means of the selecting arms, any group or groups of cells may be used to the exclusion of the remaining cells. By means of the same arms, a defect or break in the circuit which interferes with

the flow of the current may be at once localized in the group in which it has occurred. The cells are arranged in trays in the body of the cabinet where they can be reached without the slightest difficulty, and examined; and the cause of the break in the circuit obviated. The beauty of this arrangement lies in the fact that no expert is required to locate and repair the damage.

As has been remarked above, it is not advisable to employ the entire number of cells at one time. The better plan is to use, say, the first twenty cells on one day, and the last twenty on the next. In this way one-half of the entire battery is always in readiness for active work. In addition to the cell buttons and selecting arms, the key-board is provided with binding posts to which the conductors or rheophores are attached. To the other extremities of the conductors, the electrodes, by means of which the electricity is applied to the body of the patient, are attached. These binding posts, conductors and electrodes correspond to the poles of the battery, of which there are two, viz.: the negative pole or cathode, and the positive pole or anode. It is desirable to know at all times which is the negative and which is the positive pole. To determine this a number of tests have been devised. The simplest of these is the immersion of the free metallic extremities of the conductors in a glass of water and allowing the current to pass between them. The current is turned on by operating the switch S, which plays on two buttons marked respectively "Off" and "On." Having turned on the current generated, let us say by the first five cells, bubbles of hydrogen will soon be seen to appear at the negative pole.

To obviate the necessity of constantly making the test for the determination of the respective poles, and also to render unnecessary the inconvenience and loss of time in changing the conductors from one binding post to another when it is desired to change the operating pole, a little mechanism called the pole changer has been devised which is also attached to the key-board. This consists of a switch and several buttons marked + (positive) and − (negative). The selection of either pole requires simply a turn of the switch.

Milliamperemeter. Just as we have units of space, of mass of time, expressed in the terms foot, pound and second, so in electricity certain units to express electro-physical phenomena have been adopted. These are the ampere (unit of current), the volt (unit of electro-motive force) and the ohm (unit of resistance).

The ampere represents a quantity of current which is so great that it is never employed in medicine. Minute quantities represented by the one or more thousandth parts of the ampere, *i.e.*, by one or more milliamperes are strong enough for practical work in medicine. But how are we to determine the quantity of current or number of milliamperes which any number of cells of our battery is delivering? This is determined for us by an instrument which forms part of the circuit and which is called the milliamperemeter, or, for short, the milliammeter. The utility of such

an instrument will be grasped after a moment's reflection. For the purpose of keeping accurate records the instrument is indispensable. It enables us to apply from day to day the same quantity of electricity to the same patient. It enables us to increase or diminish the quantity of electricity in an intelligent manner. It might be said that the same results can be accomplished by employing each time the same number of cells or by increasing or diminishing the number of cells. But this is not the case, for the quantity of electricity generated by the cells varies in proportion to the length of time that they have been employed; if employed continuously the cells become temporarily exhausted in course of time. Again, the quantity of electricity which the patient receives from a given number of cells on different days varies with the resistance which the body of the patient may present on different days. When the resistance of the body from some cause or other has become increased, a greater number of

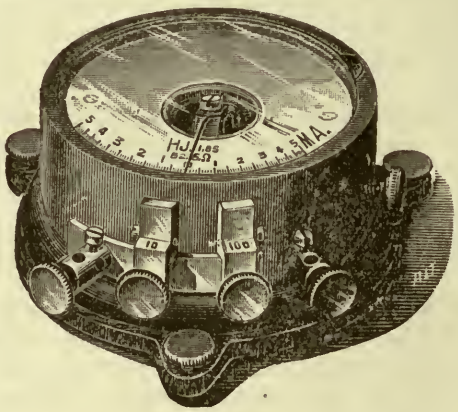

Fig. 1.

cells must be used to secure the same number of milliamperes and *vice versa;* when the resistance of the body has lessened, a fewer number of cells will have to be employed. A common experience is the following: It is frequently observed that a current which is generated by a given number of cells and which may be borne by the patient with comfort at the beginning of a seance, will, in the middle or toward the end of the sitting, be unbearable; a glance at the milliammeter shows that the current has increased in quantity. To what was this due? Certainly not to the use of a greater number of cells. The increase is explained by the fact that the resistance offered by the skin or mucous membrane of the patient at the point of contact of the electrode has become diminished and that a greater quantity of electricity penetrated the body.

Another illustration: It is often seen that whilst on one day a given number of cells produced a certain number of milliamperes,

on the following day, when the condition of the patient was the same as on the preceding day, an equal number of cells deliver fewer milliamperes. In this case, the cause is to be found in the increased resistance developed in the cells themselves. To throw in more cells into the circuit without the use of the milliammeter would be to work entirely in the dark.

Having thus outlined the uses of the milliammeter, a few words with reference to its construction and the best form to be employed in practice, will not be misplaced.

The milliammeter is nothing else than a galvanometer which consists of a magnetized needle suspended in such a manner that it will rotate within the field of a coil of wire. To the needle a long,

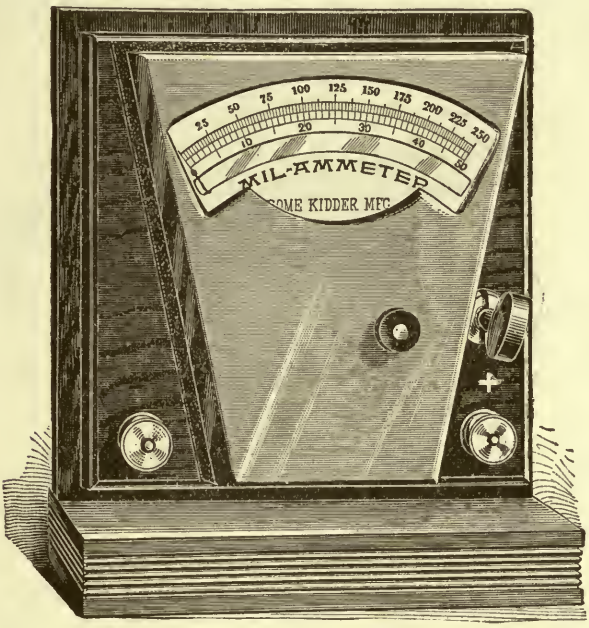

Fig. 2.

light pointer is attached. If a current of electricity generated by a cell be permitted to circulate in the coil of wire surrounding the needle, the latter will be deflected to one or the other side according to the direction in which the electricity flows. The greater the amount of electricity, the greater the deflection. If the light pointer which is attached to the needle be brought in juxtaposition to a scale representing milliamperes, the quantity of electricity is readily determined.

Mil-am-meters are made up in different styles, as the horizontal and the vertical. In the vertical mil-am-meter (Fig. 1) the pointer swings from a point in the scale marked 0, to the right, the degree

of excursion being determined by the quantity of electricity. The needle is unable to swing to the left.

In the horizontal mil-am-meter, the instrument is so constructed that the pointer may swing either to the right or to the left.

In the latter the pointer must always be brought to rest over the 0 mark. This may require some adjustment. In the vertical mil-am-meter the needle, when at rest, always points to 0 and the instrument never requires adjustment. It is for this reason that I prefer to use the vertical mil-am-meter.

The dial of the vertical mil-am-meter presents two scales. One reads from 0 to 50, the other from 0 to 250. By means of a shunt the larger scale may be readily selected.

The Rheostat. When a patient presents himself to us for the first time we are ignorant as to the quantity of electricity which he can bear with comfort. In such a case we would have to begin

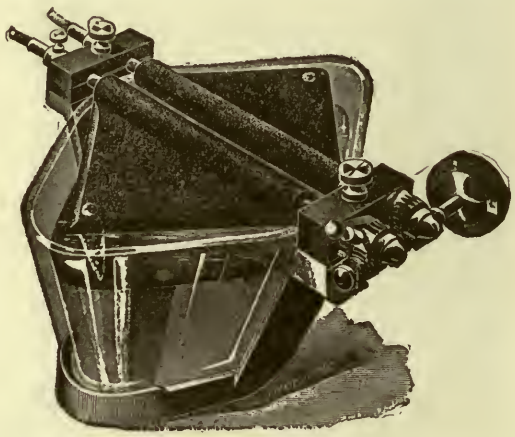

Fig. 3.

with one cell and feel our way by gradually throwing more and more cells into the circuit. One patient may hardly bear the current generated by ten cells, whilst another will easily bear the current generated by fifteen or twenty cells. This process of gradually throwing into the circuit cell after cell is a tedious one.

Moreover, in many batteries this method has the serious disadvantage of making and breaking the current each time a fresh cell is added. The patient is thereby uncomfortably or painfully shocked. To overcome these disadvantages and to allow at will a gradual increase or diminution in the strength of the current, an instrument called the rheostat or current controller has been devised. The rheostat which I employ and which has given me ample satisfaction is the Bailey Current Controller.

This consists of a movable glass trough holding water, which may be easily removed when desired, and a couple of triangular-

shaped carbon plates each bearing a conical sponge at the free angle. By means of a suitable gear the carbon plates are depressed into the water and the sponge tips made to approach one another. When the plates are raised out of the water the current is broken. As the sponge tips are made to approach one another the resistance offered to the current is gradually diminished and the strength of the current correspondingly increased. In this way it is utterly impossible to shock the patient, and the control over the current is absolute.

For the purpose of applying electricity to the body, instruments called electrodes are employed. These are attached to the wires or rheophores connected with the poles of the battery. They naturally vary in shape and material according to the different objects to be accomplished by the application of the electric current. For

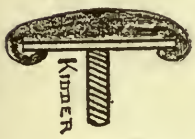

Fig. 5.

Fig. 4.

Fig. 7.

Fig. 6.

diagnostic purposes, only a few are employed. The physician will require: First, a plate electrode (Fig. 4), which is generally the indifferent pole, and is placed either on the nape of the neck or on the sternum; second, the examining electrode, which consists of a sponge-covered disc (Fig. 5) attached to a handle. For the purpose of making and breaking the current easily the handle is provided with a spring which can be manipulated with the index finger.

When it is desired to electrify nerves or very small muscles the ball electrode is used. The electrodes which have been devised for therapeutical purposes outside the field of neurology are too numerous to mention. The reader is referred to the special works on electricity for full description of them.

The Faradic Battery. The faradic battery consists of (1) one or more cells for the generation of electricity, (2) the primary coil,

(3) the secondary coil, (4) the strengthening core of soft iron within the hollow of the primary coil, (5) the automatic interrupter.

The number of cells required for the faradic apparatus rarely exceeds four. In most of the faradic batteries, a single cell suffices to produce an ample current.

The primary coil, within whose hollow is the strengthening core of soft iron, is always stationary. It consists of well insulated copper wire of moderate thickness and length, wound upon a hollow spool or cylinder of wood or hard rubber. The primary current generated by this coil is never or seldom employed.

The secondary coil is that which produces the induced faradic current which is the one generally employed in medicine. It also

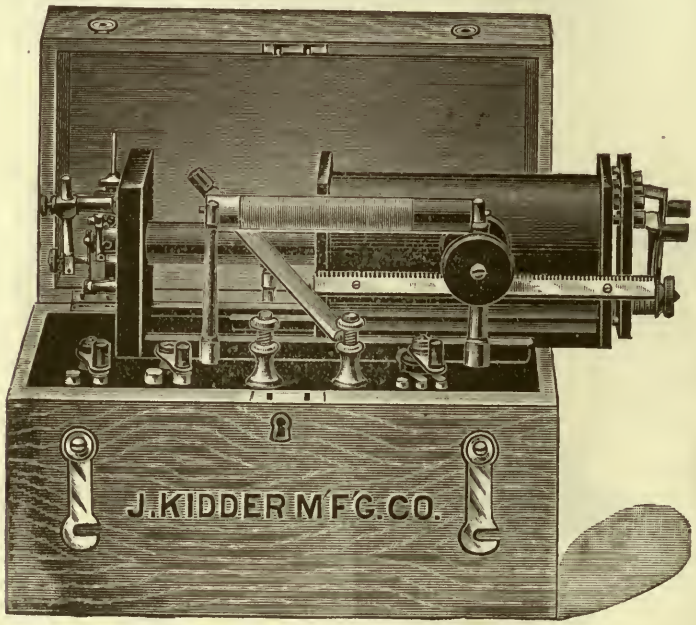

Fig. 8.

consists of turns of insulated copper wire upon a cylinder made of some non-conducting material, and hollowed out so as to enable it to pass back and forth over the primary coil.

The strength and quality of the current delivered by the secondary coil depends upon several factors, viz., the length of the wire, the thickness of the wire, and the number of layers of windings. It is therefore impossible to obtain the various effects of the faradic current by the use of one length and one thickness of wire. To meet the therapeutic indications presented by different cases, different lengths and thickness will have to be employed.

The better forms of faradic batteries are therefore supplied with several coils or, what is still better, the several coils as in the

case of the apparatus manufactured by the Jerome Kidder Manufacturing Company, are combined in one. In this apparatus three different kinds of wire are employed of lengths varying from 84 yards to 2,538 yards. By means of a simple device at one extremity of the secondary coil, it is possible to select any length or thickness of wire required. The ordinary form of faradic apparatus is supplied with one vibrator named a rapid vibrator. The Jerome Kidder High Tension Coil is supplied, in addition to the rapid vibrator, with a slow one. By means of a switch it is possible to change instantly from the rapid to the slow vibrator. The slow vibrator is useful when, for example, one desires to obtain a certain number of muscular contraction per minute. The current is made and broken automatically.

Another advantage possessed by this apparatus over others lies in its rheostat. by means of which the current can be nicely graduated. The uses of the High Tension Coil will be spoken of later.

With the forms of apparatus described, the physician has all the necessary appliances at hand for the diagnosis and treatment of many diseases which resist ordinary medications.

(*To be continued.*)

A NOSTRUM-SATURNALIA.

We have lately been glancing over the catalogue of a prominent drug journal, and find much both to instruct and to amuse. According to the historian, "All Gaul was divided into three parts;" our price list likewise divides it in three—the second of which consists of "Patent Medicines." We find this second class by careful count made up of 4,320 articles. Now, unless these things were bought and sold a commercial journal would hardly quote prices upon them; we may also feel assured that there are perhaps as many more such things of local and limited demand that do not get into the price-currents. To satisfy the American public in the way of nostrums we may therefore conclude that about 10,000 distinct concoctions are necessary.

In our list, strangely enough, we find but one man brave enough to advertise an "Annihilator;" among the popular anti's there is one "Anti-transpiration," to two "Anti-tires." There are 31 "Balms" in the nostrum Gilead, ranging in price from 75 cents to $21.00 per dozen, the "Sovereign Balm of Life" being rated at only $8.00. There are 70 "Balsams," the "Balsam of Life" costing only 75 cents a dozen bottles. Why is the balsam of life so much cheaper than the balm?

We find one "Beardine," but for the ladies' sake we should have supposed several anti-beardines would have been discovered. Among 67 varieties of "Bitters," we find 3 varieties of "Aunt

Rachel Speer's," though but one "Dromgooles English Female." Those who live in non-malarious districts would not understand what "Breakers," and "Busters" might mean. When you next butter your bread remember that 8 butter-colors are listed for your dairyman, from "Co-Coo" to "Wells in gallon cans." "Hoffman's Worm," and that of "Jaque's" is offered in "Cakes." There are 80 kinds of "Capsules," 56 "Compounds," as many "Cordials," and between 200 and 300 "Cures;" one wonders how the "Choctaw" and "Kickapoo Indian Coughs" differ from the coughs of other Indians or Caucasians, and what kind of a catarrh is the "Comet," and that of "Old Saul." A "Five Minute Headache" is a new kind. "Jackson's Common Sense Colic" would seem unnecessary to cure. Our Missouri colleagues doubtless understand the "Missouri Kidney and Liver," and the Jews, the "Palestine" kinds, while we must all struggle with the "National Kidney and Liver." "Oxygen Tobacco" exists in "small, medium and large," "Sawyer's Family" only in large and small. "Spotted Wolf Pain" and the "Wild West Colic" arouse our curiosity.

There are 41 varieties of "Drops," including "Uncle Sam's;" more than this number of "Elixirs," and "Extracts," and Hair Dyes Regenerators, Restorers, Tonics and Vigors galore. Baldness and beardlessness, from the many cures, have evidently worried the people greatly. The "Thunderclap" and "Zip Injections" are more picturesque and explanatory as terms than "7—11" and the "V. I. G." There are 16 "Killers" to 1 "Kill-Em." The rôle played by muscular rheumatism, etc., may be guessed by the fact of sale for more than 100 kinds of liniments with remarkable names. "Mother's Blessings" and "Mother's Friends" naturally follow many "Milks" and "Mixtures." We cannot mention the excellent "Oils" and "Ointments," of magnetic, wizard, magic, mystic and electric powers, for all the pains, piles, tetters, rheums and itches that have afflicted humanity since the days of Job, and that despite these things still appear active.

Of Pills, those potent and beloved "little" mysteries, we require nearly 300 varieties, the liver, seemingly, being the poorest in function of all the bodily organs, and next to this some mysterious "Female" ones. The picturesque and imaginative advertiser here finds an easy outlet for his humor and descriptive powers in "Daylights," "Early Risers," "Little Giant," "Lilly's Aphrodisiac," "French Female," "Little Doctor," "Oriental Sexual," "Sexine," "Lazy Liver," "Tutts' Tiny," "Pennyroyals," "Regulatives," "Precious'," "Mother Seigel's Operating," "Nine-o'clock," "Gunn's," "Universal," etc. We can even supply the German Emperor with "genuine" American "Kaiser Wilhelm's."

Plasters are magnetic, voltaic and electric as desired, while Powders are guaranteed to cure "Celery Headache," "German Condition," "English Stable," etc. It is strange how the quack has hit on the word "Condition" in reference to powders. There being no less than 23 powders for this disease. "Parotid Extract,"

and "Ovarian Extract" powders indicate an up-to-date science. "Doctors' Headache," we are glad to learn can be stopped. "Preventers" and "Preventives" have a suspicious appearance, as do the many "Regulators," "Renewers," "Renovators" and "Restorers;" "Reliefs" and "Remedies" are of course numerous—all "Galvanic," "Wonderful" and "Magic." We trust there are not as many coughs as there are sirups—somewhere near 150 – though one of these, "Boy-Kott-Your-Cough," might alone have sufficed, it would seem. The "Tonics" and "Wafers" should alone have healed man of all his weaknesses and ills.

The long list, with its unconscious display of ignorance, and its conscious pride in fraud and humbug, is a commentary both ludicrous and pathetic upon our popular medical state; through it we get a faint but sickening glimpse of the evils real and fancied that afflict the stupid, magic-loving, civilization-veneered, or semi-savage populace. We have not counted the cures for corns advertised in the list, but from the very large number we can guess how painful to the poor barbarian has been the terrible process of shoeing and booting him. The fact also shames us a bit to reflect that in no medical school or book, so far as we are aware, is the young doctor taught the treatment of this, which at least is a great spoiler of disposition—the corn. More serious and illuminating is the part that headache has played among the people. There are doubtless a thousand headache-cures upon the market. And it is to be doubted if the medical men of the past, if not of the present, have not themselves been responsible for the indifference to etiology shown by the fact, and the absurd reliance on magic and drugs for therapeutics.

When we proceed to the economic side of the question we stand in amazement at the spectacle of the untold millions upon millions of money wasted by the people in their stupid pursuit of these will-o'-the-wisps of painlessness and health. Ask for a tithe of the amount, or the hundredth, by taxation, for real preventive medicine, sanitary legislation, or hygienic laboratories, and indignant rebellion would be the instant answer. We have no space left, and hardly any indignation, for the sin of the syndicates, and the greed of the gullers; it is lost in pity for the gulled.—*Phila. Med. Jour.*

CURATIVE POWER OF SLEEP.

In an article entitled "The Slumber Cure," contributed to *Health Culture*, New York, November, by Dr. Felix L. Oswald, the author asserts the sovereign efficacy of sleep in a great variety of complaints. He says:

"Brain-work succeeds best while the activity of the animal organism is reduced to an indispensable minimum. The mind is never clearer than early in the morning, when the work of diges-

tion is finished; and for similar reasons digestion proceeds most prosperously when the brain is at rest. Mental distress almost paralyzes the bowels of sensitive individuals, and a business man of my acquaintance denies himself to all comers for the first three hours after dinner to lessen the risk of his dyspepsia being aggravated by unwelcome news. . . . The healing and soothing faculty of nature can work to the best advantage while the meddlesome mind not only forbears interference, but ignores her proceeding altogether, and consents to undergo the temporary eclipse of slumber of a deep fainting fit. 'We owe that victory to the snow-storms of the last week,' said General Traun, of the Austrian army; 'there was a messenger on the way with the usual budget of crazy instructions from the Kriegs-Hofrath (the chief war-office), but the snow stopped him, and being once left to ourselves we rushed in and routed the enemy.'

"Even thus the 'animal soul' avails itself of blest periods of non-interference, and it is a suggestive fact that in emergencies of mortal danger the healing All-mother begins her work by knocking the meddler silly in order to get her hands wholly free. An overdose of stimulants, a fearful fright, act like a blow on the head, and bring on fainting fits that often defy restoratives, but subside of their own accord as soon as the crisis has been weakened and the risk of interference has become less fatally serious. . . .

"Sleep, the twin brother of syncope, gives the mystic healing power a similar opportunity, and it is almost incredible how short an interval of 'conscious ceregration' may often suffice to effect a favorable decision in the crisis of an organic disorder. Does the animal soul, like the healers of the Parsee sanctuaries, try to conceal its procedures, or shall we assume that the activity of the mind is so serious a drain upon the resources of the organism that it prevents the success of the briefest remedial ministrations? A correspondent of mine, who is subject to attacks of spasmodic asthma, often passes a whole afternoon on suburban trolley-cars, knowing from experience that the rocking motion and the sight of monotonous streets are apt to result in cat-naps, and that the shortest nap of that sort is sufficient to break the spell of the *dyspnœa* — the distressing difficulty to draw a full breath of life-air. . . .

"A mere cat-nap is also sufficient to relieve sick headaches, dizziness, spasms of colic and neuralgia; and protracted slumber—five or six hours of dreamless sleep—has saved more than one life that could not have been as much as respited by all the drugs mentioned in Bartholomew's 'Hand-book of Therapeutics.' Chronic diarrhœa has been known to yield to that specific, and in many kinds of fevers, too, everything is gained if the patient can be helped to a few hours of deep slumber without the use of narcotics. Monotonous work, purposely continued to the verge of fatigue, may help us to relieve insomnia, and in obstinate cases the appli-

cation of warm winding sheets to the feet and of cool cataplasms to the head will promote the same purpose by alleviating the engorgement of the cerebral blood-vessels.

"Opiates only mock the patient with the appearance of relief, and, like brandy in the rôle of a dyspepsia cure, frequently result in an aggravation of the trouble. Laudanum paralyzes the digestive organs, and not only fails to reproduce the conditions of natural slumber, but goads the brain into fever-dreams, more permanently injurious than sleeplessness."—*Dietetic and Hygienic Gazette.*

MILK DIET FOR ARTICULAR RHEUMATISM.

THE fever of acute rheumatism generally lasts two or three weeks, and, consequently, either from the time it lasts or on account of the rise of temperature, causes an enormous consumption of blood corpuscles, which produces profound anæmia in the patient. The fall of temperature is the best criterion of the cure, and coincides exactly and constantly with the disappearance of the pains.

M. Bigot, in the *Revue Mensuelle de Medicine et de Chirurgie*, gives some clinical facts observed at the Hotel Dieu, at Lyons, on this subject. Quoting from *Health*, the deductions and conclusions drawn by M. Bigot touching the nature of acute articular rheumatism, and the efficacy of the milk regimen in the course of this affection, are based on a number of analyses of urine, made as completely as possible, since they give the amount of the total nitrogen, of the urates, of the total chlorides, and of the phosphoric and sulphuric acids.

The tortures endured by patients suffering from articular rheumatism are in themselves alone of a violence and tenacity sufficient to induce the physician to endeavor to oppose to this disease a treatment which would unite the three qualities, *Cito, tuto, et jucunde.* The milk diet seems capable of fulfilling this desideratum. The therapeutical views of M. Bigot on the subject may be thus summarized:

The milk causes the temperature to fall rapidly below hyperpyrexia, and simultaneously assuages the pains in a period varying from three to eight days. The effects from these two points of view are more prompt and more powerful if the patient be submitted to the milk regimen at the outset of the affection. This milk regimen, without overcharging the stomach or raising the temperature, by its nutritive power and its facility or digestion, prevents in a great measure that characteristic and generally troublesome anæmia left behind by attacks of rheumatism. Besides these general effects, milk diet has a special action on the urinary function, which is clearly indicated in rheumatism. Milk strongly favors the elimination of all the waste principles accumulated in

the organism ; its exclusive use causes both the quantity of urine excreted in twenty-four hours and the quantity of all the saline principles dissolved in this liquid to increase rapidly. Density, on the contrary, experiences a proportionate decrease. The impetus given to the urinary function by a milk regimen allows a glimpse of the nature of rheumatism, its near and intimate causes. The analysis of urine seems to show that there is an accumulation of urates or uric acid in the organism of rheumatic sufferers, and that its diminution under the influence of milk is not one of the smallest benefits of this regimen.—*The Dietetic and Hygienic Gazette.*

An interesting phase of the abuse of hospital and dispensary privileges is one that we have nowhere seen referred to, but which is brought to mind by a recent occurrence in an English court. A woman brought action against the owner of a house in consequence of injuries received through an accident arising out of the failure of a plate covering a coal-cellar to work properly. A hospital surgeon who attended her was severely rebuked by the judge for charging a fee of two guineas for making a report of the patient's condition, the charge being characterized as extortionate. The *Lancet*, from which we quote the facts, makes the legitimate inference that if a patient is rich enough to bring an action in court, he or she is surely rich enough to pay for a medical report; but, as a matter of fact, the report in the present instance was drawn up, not for the poor plaintiff but for the rich defendant. With our cotemporary we are quite certain that the plaintiff's counsel did not render his services gratuitously, nor would he be expected so to do. Then why should the medical man? Now, the point that we wish to make is this: It is not uncommon for patients treated at dispensaries to ask for and receive certificates of illness or disability that will secure them certain pecuniary benefits, which it is fair to presume it was originally conceived should be devoted, among other things, to payment for medical services, but for which the dispensary physician receives no consideration. No doubt the same practice occurs among hospital patients. It is not uncommon, likewise, for insurance benefits to revert to families of patients who have died in hospitals, while again no consideration is given to the hospital physician whose diagnosis and signature are essential to make the claim valid. Now, there is certainly something wrong with a system that permits one set men to give much and receive little or nothing in return, and equity and fair dealing demand that there be no delay in changing such a system. It is time the medical profession should demand for the community the same amount of charity from the legal and other professions as the community demands from the medical profession.—*Phila. Med. Jour.*

Gynecology and Obstetrics.

. . . IN CHARGE OF . . .

GEO. T. McKEOUGH, M.D., M.R.C.S.(ENG.), AND J. H. LOWE, M.D.

THE AMERICAN PEDIATRIC SOCIETY'S COLLECTIVE INVESTIGATION ON INFANTILE SCURVY.

THE subject of infantile scurvy has so recently come into prominence, and still presents so many mooted questions, that the American Pediatric Society appointed a committee to undertake a collective investigation of the matter. The committee has made its report which is quite exhaustive, and has drawn the following conclusions from the combined study of its etiology and treatment:

(1) The development of the disease follows in each case the prolonged employment of some diet unsuitable to the individual child, and that often a change of diet, while at first thought would seem to be unsuitable, may be followed by prompt recovery.

(2) That in spite of this fact regarding individual cases, the combined report of collected cases makes it probable that in these there were certain forms of diet which were particularly proved to be followed by the development of scurvy. First, in point of numbers, here are to be mentioned the various proprietary foods.

(3) We find that, in general, the cases reported seem to indicate that the farther a food is removed in character from the natural food of a child, the more likely its use is to be followed by the development of scurvy.

(4) There is no evidence that any treatment with drugs has an appreciable effect upon the disease.—*Medical News, July 2nd, 1898.* G. T. M'K.

TREATMENT OF FIBROIDS BY SECURING UTERINE ARTERIES.

GOUILLAND (epitome of the *British Medical Journal*, June 18th, 1898) maintains that though oophorectomy for fibroid is out of date and hysterectomy much in vogue, nevertheless treatment by the simpler method of cutting off the chief blood supply of the uterus is rational and effective. He has treated successfully one case by simple forcipressure of the arteries for forty-eight hours.

The operation was performed in October, 1894. In July, 1896, the patient was examined. The hæmorrhages had ceased entirely and no pelvic pains could be felt. The uterine cavity which, two years earlier, measured four and one-third inches, was now but two and a half in length. Hartmann and Fredet are not surprised that removal of the ovaries is often ineffective, as it is the uterine and not the ovarian arteries that ought to be secured. They report five cases of ligature of the uterine arteries through a vaginal incision. All five cases have done well. Out of forty performed after the same methods by others, no deaths occurred.

Goltschalk (*Medical News*, July 2nd, 1898, Berlin Letter) states that the vaginal operation is absolutely without danger, and is carried out as follows: After curettement a transverse incision is made around the cervix, the bladder is pushed back from the vagina and broad ligaments, and the posterior vaginal vault is also pushed away from the broad ligaments, until the ligament containing the uterine artery on either side is fully exposed. This is ligated as close as possible to the uterus by three interlocking ligatures on each side. The peritoneal cavity is not opened. The ligatures are then cut short, and the incision in the vaginal vault is sutured. Twenty patients operated upon by this method all recovered, the patient being up and about in ten days. In all cases the tumors palpably shrunk, while in seven they could no longer be made out.

G. T. M'K.

THE MANAGEMENT OF SOLID TUMORS OF THE OVARIES COMPLICATING PREGNANCY.

Swan (Johns Hopkins Hospital Bulletin, March, 1898) summarizes the results of a thorough search of the literature on the above subject as follows:

(1) Solid neoplasms of the ovary complicating pregnancy are exceedingly rare.

(2) The diagnosis of this rare combination of a physiological and pathological process may be very difficult. The physical examination with the signs of pregnancy, and those which belong more particularly to solid ovarian growths, will generally enable us to make at least a probable diagnosis and one sufficient to warrant an exploratory section.

(3) The prognosis in cases of solid growths of the ovary complicating pregnancy is much worse both for mother and child than in those of cystic neoplasms of these organs. This is to be explained by the fact that the former are usually smaller and remain in the true pelvis and obstruct the parturient canal; while the latter, owing to their bulk and consistence rise above the pelvis, and the dystocia if produced at all is of a less serious nature. Abdominal section and extirpation of solid tumors during the early

months of pregnancy produce equally good results, so far as the life of the fœtus is concerned, as in the case of cysts the ultimate result in the case of the mother depending of course on the malignant or benign nature of the growth.

(4) The general rule should be to operate on all cases between the second and fourth months of gravidity. It would be hard to find a stronger argument in favor of the elective operation for extirpation of these ovarian neoplasms than is furnished by a comparison of the statistics of the best authorities.

(5) The compulsory operation during the latter half of gestation during labor or the puerperium will rarely be required, preference being given to the procedures in the order above mentioned.

G. T. M'K.

STERILITY.

Dr. W. Gill Wylie (*American Gynæcological and Obstetrical Journal*, June, 1898), in a very practical paper, gives his treatment of sterility due to disease of the endomitrium. The endomitritis is usually a question of imperfect development. Young girls, between fourteen and sixteen, are allowed to develop their brain at the expense of their genital organs. In a typical case of dysmenorrhœa and sterility, the os internum is hypersensitive and there is a creamy, yellow, or thin ærid discharge from the uterus, granular erosion and ulceration of the cervix may be present. There is often a slight degree of antiflexion, and an irritable condition of the endometrium similar to that found in granular lids. In such cases the best thing to do is to divulse the canal, thoroughly curette the uterus and insert a uterine drainage tube, and it is absolutely necessary to use a hard substance for uterine drainage, and that this substance must be made hollow in the form of a tube. Dr. Wylie's tubes are made of hard rubber, one and a half to two inches long, and have a deep groove down the side in order to facilitate drainage. The tube is also made with a small bulb on the end in order to prevent it being expelled from the uterus. The patient is left in bed for a week, when the tube is removed. No douches are given except the one given previously to the operation, but the vulva is protected by a pad which is changed frequently. As a rule nothing more is necessary. The dysmenorrhœa is relieved and the woman generally becomes pregnant in six months.

G. T. M'K.

Dr. J. M. MacCallum, Dr. F. N. G. Starr, Dr. C. O'Reilly, Dr. Jas. Thorburn, Dr. W. A. Young, and Dr. D. C. Meyers were amongst the Toronto members who attended the meeting of the Canadian Medical Association at Quebec last month.

Medicine.

. . . IN CHARGE OF . . .
J. J. CASSIDY, M.D., AND W. J. WILSON, M.D.

CLASSIFICATION OF DISEASES.

ADOPTED by the Registrar-General of Ontario in the preparation of his annual report: being the shortened Bertillon classification approved of by the American Public Health Association, and now in use in several of the States of the American Union, in Mexico, and in the Province of Quebec. Physicians in making returns of deaths will please conform as far as possible to this classification, in order to promote precision and accuracy in the preparation of the report of the Registrar-General.

P. H. BRYCE, M.A., M.D.,
Deputy Registrar-General.

GENERAL DISEASES.

I.

Communicable (Epidemic) Diseases.

1. Typhoid Fever
2. Smallpox
3. Measles
4. Scarlet Fever
5. Whooping Cough
6. Diphtheria and Croup
7. Influenza
8. Other Epidemic Diseases

II.

Other General Diseases.

1. Pyemia and Septicemia
2. Malarial Fever
3. Tuberculosis and Scrofula
4. Syphilis
5. Cancer
6. Rheumatism and Gout
7. Diabetes
8. Other General Diseases
9. Alcoholism, Acute and Chronic

LOCAL DISEASES.

III.

Diseases of Nervous System and Organs of Sense.

1. Encephalitis
2. Simple Meningitis
3. Epidemic Cerebro-spinal Meningitis
4. Congestion and Hemorrhage of the Brain
5. Softening of the Brain
6. Paralysis without specified cause
7. Insanity
8. Epilepsy
9. Convulsions (not puerperal)
10. Other Nervous Diseases

IV.

Diseases of Circulatory System.

1. Pericarditis
2. Endocarditis
3. Organic Heart Disease
4. Angina Pectoris
5. Diseases of the Arteries, Atheroma, Aneurism, etc.
6. Other Diseases of the Circulatory System

V.

Diseases of the Respiratory System.

1. Acute Bronchitis
2. Chronic Bronchitis
3. Broncho-pneumonia
4. Pneumonia
5. Pleurisy
6. Congestion of the Lungs (including pulmonary apoplexy).
7. Asthma and Emphysema
8. Other Diseases of the Respiratory System

VI.

Diseases of the Digestive System.

1. Ulcer of the Stomach .....
2. Other Diseases of the Stomach (cancer excepted) .....
3. Infantile Diarrhœa and Gastro-enteritis ("Cholera Infantum")
4. Diarrhœa and Enteritis (not infantile) .....
5. Dysentery .....
6. Hernia and Intestinal obstructions
7. Other Diseases of the Intestines..
8. Diseases of the Liver.....
9. Peritonitis (not puerperal).....
10. Iliac abscess (typhlitis, peri-typhlitis, appendicitis).....

VII.

Diseases of the Genito-Urinary System.

1. Acute Nephritis .....
2. Bright's Disease .....
3. Other Diseases of the Kidneys and Adnexa.....
4. Vesical Calculi .....
5. Diseases of the Bladder .....
6. Diseases of the Male Genital Organs
7. Metritis .....
8. Other Diseases of the Uterus .....
9. Ovarian Cysts and other Ovarian Tumors.....
10. Other Diseases of the Female Genital Organs.....

VIII.

Puerperal Diseases.

1. Puerperal Septicemia.....
2. Puerperal Albuminuria and Convulsions .....
3. Other accidents of Pregnancy causing sudden death.....
4. Puerperal Diseases of the Breast ..

IX.

Diseases of the Skin and Cellular Tissue.

1. Erysipelas .....
2. Other Diseases of the Skin and its Adnexa (Cancer excepted).....

X.

Diseases of the Locomotor System.

1. Pott's Disease.....
2. Diseases of Bones and Joints .....
3. Amputation (for unspecified disease)

XI.

Malformations, Diseases of Infancy. Diseases of Old Age.

1. Still-Births .....
2. Congenital Debility and Malformations .....
3. Other Diseases of Infancy .....
4. Senile Decay.....

XII.

Suicide.

1. Poison .....
2. Strangulation .....
3. Gas Poisoning.....
4. Drowning.....
5. Firearms .....

XIII.

Accident.

1. Fractures and Dislocations .....
2. Gunshot.....
3. Lightning .....
4. Drowning .....
5. Electric Cars.....
6. Bicycles .....
7. Railways .....
8. Burns and Scalds.....
9. Homicide.....

XIV.

Ill-Defined Causes.

1. Dropsy .....
2. Tumors.....
3. Other Ill-Defined Causes .....

Dr. R. J. Dwyer is at present studying at Johns Hopkins Hospital, Baltimore.

New York School of Clinical Medicine.—Some important changes have been made in the professorships of the New York School of Clinical Medicine. Dr. John J. Morrissey has been elected Professor of Practice of Medicine; Dr. Herman Collyer, Professor of Gynæcology, and Dr. Louis Fischer, Professor of Diseases of Children, has been elected Secretary of the Faculty.

Public Health and Hygiene.

... IN CHARGE OF ...

J. J. CASSIDY, M.D., AND E. H. ADAMS, M.D.

THE PROVINCIAL BOARD OF HEALTH.

THE Provincial Board of Health began its quarterly meeting at Dr. Bryce's office at 10.30 a.m., August 4th, with Drs. Macdonald, Vaux, Kitchen, and Bryce present. Immediately after the opening of the meeting Dr. Bryce informed the Board of his action in warning the keepers of hotels and others at summer resorts in Muskoka to refrain from dumping sewage into the lake, as such a practice was likely to increase disease. The Board declared itself as concurring in the action taken by the secretary.

The supply of water is drawn by one of the Rat Portage hotels from the bay. As the use of the water is deemed dangerous, it was decided to give the proprietor of the hotel one week to cut off the pipes bringing it from the bay. Should he refuse to comply with orders he will be summarily dealt with.

A complaint regarding the Iroquois water supply also came up for consideration. This Dr. Bryce has recently investigated, and found that the waterpipe, drawing the water from the St. Lawrence river had been broken, and the supply was drawn from an old canal instead. As the waterworks have changed hands recently, the responsibility could not be fixed, and it was decided to defer the matter, until the question of proprietorship had been settled.

In connection with the report from Goshen, Claremount County, Ohio, of fifteen cases of smallpox, Dr. Bryce reported having visited a camp of Galicians while at Winnipeg recently. He had been informed, that in two shiploads of those people who came through there had been three or four smallpox cases, after leaving the Halifax quarantine.

Communications were read from Mr. J. Maybee, Solicitor for the township of Downie, giving notification, that the township is about take proceedings against the corporation of the city of Stratford to and several of its citizens to prevent the pollution of the River Avon with sewage. The river flows through a number of farms in Downie, and the farmers claim that the water is not only rendered unfit for domestic purposes, but is also liable to spread disease among the cattle. The chairman and secretary were authorized to investigate the case.

A motion was passed referring the account of Mr. G. D. Stinson, Fort Francis, to the Provincial Secretary. The claim is one of long

standing, and is for having kept a number of moneyless miners when the old frontier law was in force. Dr. Bryce reported having investigated the case, and said that Mr. Stinson was entitled to be recompensed, having kept twenty at one time, for which he did not receive a cent.

Dr. Bryce showed a large bunch of correspondence relating to the condition of a pig-pen and slaughter-house at Oakville. The question had been sent to the local board and back to the Town Council several times, but remained in the same position as ever, notwithstanding the fact that there was a by-law prohibiting the establishment of a slaughter-house in the town. A settlement of a similar case at Creemore was reported.

The Board reassembled at 2.31 p.m. Present: Drs Macdonald, Cassidy, Kitchen, Vaux and Bryce. Mr. Topp, C.E., Chatham, was present and requested permission to build a sewer on Baldwin, Forsyth and Grant Streets, in Chatham, to discharge into the Thames, and subsequently into a trunk sewer, which is to be constructed along the banks of the river. The Board passed a resolution stating in substance that the work is a desirable one, but leaving the decision to carry on the work to the City Council. Mr. Mackenzie presented a brief report respecting the method followed by the Quebec Board of Health in collecting blood smears on glass for the diagnosis of enteric fever. He recommended the method.

The Board continued its session in the office of the secretary next morning. Dr. Macdonald presided, and there were also present Drs. Cassidy, Kitchen, Vaux and Bryce. A communication was received from Dr. Rice, medicl health officer of Woodstock, seeking the assistance of the Board to do away with stagnant ponds that are numerous in the town. Drs. Bryce and Kitchen will visit Woodstock and investigate.

A complaint was received from Berlin relating to wells, the water of which was thought to be polluted.

The medical health officer of Dereham township reported an outbreak of diphtheria, and stated that physicians were pronouncing the cases tonsillitis, and allowing patients to move about and spread the disease. The assistance of the Board was sought to secure proper isolation.

Dr. Bryce presented his report on contagious diseases. Another outbreak of typhoid at Rat Portage, through using water from the lake before the town, had resulted in five deaths. The taking of water would have to be restricted to the source recently approved by the Board. Tuberculosis was still claiming its usual quota of victims.

The Province had been free from smallpox, but defective quarantine management at Halifax had let a number of cases through, and the doctor thought the educational authorities of the city should take advantage of the favorable season to demand certificates of vaccination from all pupils upon the opening of the schools in September. The report was adopted.

Dr. Cassidy presented a report on the treatment of diphtheria at the Children's Hospital, Paris, and at the Isolation Hospital, Toronto. See page 136.

Correspondence was then read from Kincardine, asking permission to lay additional sewers. The permission was granted. Plans of the town of Fort William were laid before the Board and permission was asked to take the town water supply from a point on the Kaministiquia River, three miles above the town, while the sewer outfall is to be laid into the river, one quarter of a mile from its outlet into Thunder Bay. The permission was granted.

Dr. Bryce read a report on the nuisance caused by deposits of offensive manure, made in the vicinity of railway stations in Ontario. He advised that special regulations be passed by the Board, restraining the railway authorities from continuing the practice of discharging the litter of cattle cars in the vicinity of stations. The report was adopted. Dr. Cassidy was requested to examine into the nuisance created by a slaughter-house at Oakville and report.

The Board then adjourned. J. J. C.

THE BOSTON BOARD OF HEALTH.

TWENTY-FIVE years ago, January 15, 1873, the Boston Board of Health was established. It came into existence under pressing circumstances, principally to cope with an epidemic of small-pox that had raged in Boston for about three months. As nearly as could be estimated, there were 650 cases of small-pox in the city, some of which ware cared for at Gallop's Island, some at a hospital that had just been built, and others were isolated in their houses all over the city. Trade was diverted from the metropolis, and people were moving into the suburbs. In about four months there was not a case of small-pox in the city.

Not until the evil had been wiped out did the commissioners find time to open their eyes to other needs of the city, pertaining to its sanitary condition; but when the field was cleared to admit permanent improvements one great need after another became apparent. Quarantine regulations were established for vessels and immigrants; medical inspectors were appointed; the inspection of tenement houses and provisions was begun; the office of city registrar was created for the registration of births and deaths, and steps were taken in 1874 for the better ventilation of school-houses. The duties of the board were greatly increased early in the year 1875 by a city ordinance placing the cemeteries and burial places in its charge. By a persistent agitation the board succeeded in 1875 in awaking the City Council to the necessity of a change in the system of sewerage, but it was not until many years later that work was actually begun. Among the other per-

manent improvements due to the work of the board, one that was closely related to the system of sewerage, was the establishment, in 1879, of many public baths upon practically the same basis as they are found to-day.

In order to appreciate the worth of what the Board of Health has done, one must only look upon the following result:

The number of deaths in Boston from January 4th, 1873, to April 25th, 1874, a period of nearly seventeen months, was 10,375, out of a population of about 322,000. Whereas last year, with an estimated population of 528,912, there were but 11,154. The relation of the number of deaths from preventable diseases to the total death rate tells more specifically what the result of the health officers' labors has been.

Statistics show that the percentage of deaths from such diseases of the total mortality was 33.89 in 1872. This rate of percentage began to diminish with the creation of the board, but there was no marked difference until in 1885, when it went down to 19.53. Since then it has diminished with unfailing regularity, and it was lower last year than ever, with one exception. E. H. A.

$10,000,000 Loss Through Typhoid Fever.

At a meeting of the Water Committee of Councils, of Philadelphia, there was a delegation of physicians from the various medical societies of the city, with a view to such action by the public authorities as will purify the water supply and stay the progress of typhoid fever. Dr. S. Solis-Cohen, of the County Medical Society, briefly stated the object of the delegation and submitted a general statement of the committee's views. . . . "Basing an estimate upon the statistics of the Board of Health for the ten years ending December 31, 1897, which show the total mortality from typhoid fever in Philadelphia during that time to have been somewhat over 5,000 deaths, representing about 50,000 cases of sickness, and estimating the pecuniary loss from each death to have been $1,000, and from each case of sickness to have been $100, the citizens of Philadelphia have in that time suffered a money loss, which could have been absolutely prevented by filtration of the water, of some $10,000,000. This would not only have paid for filtering the water supply, but would also have spared all this disease and death." E. H. A.

State Regulation of Marriages.

Parker, of Ohio, has introduced into his State Legislature a bill to regulate marriages. It provides for the appointment by the Probate Court of each county a Board of Marriages composed of physicians. To this board, consisting of three members, persons

who wish to marry must make application. The board will refuse to grant a license in case either party to the proposed contract has dipsomania, kleptomania, insanity (true or hereditary or resulting from vice), certain blood diseases or tuberculosis. It will charge $2.50 for each license, and out of the fund so made each member will be paid a salary of $1,000. There is provided a method of appeal to the State Board of Health in case of any refusal to grant the license. The bill is at present impracticable and will not probably be made a law as yet, although in time public sentiment may be educated in that direction.—*Chicago Medical Times.*

E. H. A.

A Disinfected Newspaper.

Food and Sanitation says that the scare caused by the outbreak of smallpox in Middlesborough has been clearly diverted by the *North-Eastern Daily Gazette,* which has a certified circulation of 60,000. The publisher has arranged to have every copy of the paper disinfected as long as the epidemic lasts. He has thus converted the daily issue into an agency for the widespread distribution of disinfecting influences, and for the provision to all readers of the means of safeguarding the home and the person. E. H. A.

Measles Omitted from Compulsory List of Infectious Diseases.

The *British Medical Journal* notes that the Penzance Town Council has decided to omit measles from the list of compulsory notification diseases, and mentions the fact that while in the last year or so 105 districts had adopted compulsory notification in this disease, it had been subsequently revoked in nearly a third of the cases. The reason for this is that without provision for prompt hospital isolation little or no value attaches to the notification of disease, and on the other hand entails considerable expense.

E. H. A.

Mortality Among Physicians.

In the unpleasant competition for the highest death rate among professional men, Dr. Thalam states in the *Deutsch Medizinal Zeitung* that the death rate of physicians stands at 9.66, as compared with 8.21 among lawyers and 5.33 for the clergy. Among all classes of professional men the most frequent cause of death are referable to the heart. Other most frequent causes are gout, diabetes, diseases of the genito-urinary tract and suicide. During the last ten years the percentage of suicides has increased, while in a corresponding ratio the number of deaths from alcoholism has been diminished. E, H. A.

REPORT OF DEATHS FROM CONTAGIOUS DISEASES IN ONTARIO FOR THE MONTHS OF JUNE AND JULY, 1898.

PREPARED BY P. H. BRYCE, M.A., M.D., DEPUTY REGISTRAR-GENERAL.

JUNE, 1898.

Total Population Reporting.	Total Municipalities Reporting.	Total Deaths Reported.	Scarlatina.	Rate per 1,000 per Annum.	Diphtheria.	Rate per 1,000 per Annum.	Measles.	Rate per 1,000 per Annum.	Whooping Cough.	Rate per 1,000 per Annum.	Typhoid.	Rate per 1,000 per Annum.	Tuberculosis.	Rate per 1,000 per Annum.
1,676,935 74%	621 83%	222	9	0.06	92	0.2	7	0.05	7	0.05	10	0.07	160	1.1

JULY, 1898.

1,844,912 86%	688 92%	224	15	0.09	16	0.1	18	0.1	12	0.08	20	0.1	143	0.9

Population of Province 2,263,492

Municipalities of Province..... 745

Proceedings of Societies.

THE CANADIAN MEDICAL ASSOCIATION, QUEBEC, AUGUST 16th, 17th and 18th.

On the 16th ult. the thirty-first annual Convention of the Canadian Medical Association opened in the Convocation Hall of Laval University, Quebec, under the chairmanship of the President, Dr. J. M. Beausoleil, and was attended by a great many physicians from Quebec, Ontario, Nova Scotia, Prince Edward Island, and the United States. In the hall which adjoins the Convocation Hall there was an exhibition of surgeons' and physicians' appliances and requisites, as also quite a large pathological exhibition.

In the Convocation Hall there was a very pretty display of flowers, palms and other decorations, including festoons of evergreen, which gave evidence of great taste, and reflected much credit upon the gardeners of the Sacre Cœur Hospital of St. Sauveur. In the gallery too there was stationed an orchestra, which from time to time discoursed music. Altogether every arrangement which could possibly be made to promote the pleasure and comfort of the delegates was assiduously looked after by the local committee, which was constituted as follows: Dr. C. S. Parke, Chairman; Dr. Marois, Secretary; Drs. Ahern, Chs. Verge, A. G. Belleau, E. Turcot, Robitaille, C. C. Sewell. These gentlemen deserve all praise for their exertions.

When the session opened, Dr. Parke, chairman of the local committee, made a short and informal, but appropriate address of welcome to the delegates. He said that he had hoped that His Worship, the Hon. S. N. Parent, Mayor of the city, would have been present to welcome them, but he had been called away by departmental business. However, he cordially greeted them all, and hoped that they would derive much pleasure and instruction from their visit to Quebec. In such time as they could spare from their deliberations, the local physicians would have the greatest pleasure in showing the visitors the glories of Quebec, and sights of which few cities in the world can boast. The noble river that flowed at his feet would also, he said, be called upon to contribute to the entertainment, and an opportunity would be found to show those present the famous Falls of Montmorency, etc. He added that though, as he had remarked, the members would not have the pleasure of being welcomed by His Worship the Mayor, still their loss was not so great as it might have been, since Alderman Martin

Foley was present to replace him. In conclusion he thanked his audience for the very attentive hearing they had given him, and once more bid them welcome.

Alderman Foley then in the name of the people offered to the delegates the following civic address of welcome.

To the President, Officers and Members of the Canadian Medical Association:

Ladies and Gentlemen,—In the absence of His Worship the Mayor, who has been called outside of our limits on an official visit as a Minister of the Crown, it is my pleasant duty as pro-Mayor to welcome you and to tender you the hospitalities of the city of Quebec.

Our people fully appreciate the priceless value of gatherings like this one, composed of men who represent the progressive march and the scientific attainments of the medical profession in Canada.

You are welcome in our midst, and more especially to this ancient seat of learning founded by Monseigneur de Laval and which has made Quebec famous as the pioneer of higher education in the New World.

We know that your learned deliberations will have beneficial results for the progress of science and the relief of suffering humanity.

I am sure I am voicing the sentiments of our population when I express the hope that the name of Quebec will be inscribed on your list and on the list of all kinds of associations similar to yours, as the favorite spot where assemblies like this to be held in future will be pleased to meet; a centre of attraction to which everybody should turn, and which offers to the scientist, worried by the labor and fatigue of deep research and unceasing mental efforts, the refreshing breezes of our mighty river and the unrivalled scenery, which captivates the eye, from the heights of the historical cliff of Quebec.

Gentlemen, you have our best wishes for the success of your convention.

We hope you will make it last as long as possible, for we are sure that your clients have agreed to give you a prolonged furlough and that Providence will see that your absence is not detrimental to their health.

Dr. M. J. Ahern, representing the Medical Faculty of Laval University, then presented its greetings in the following happy retrospective remarks:

"The few words I have to say to you have been rather pretentiously styled an address in this programme—an address of which I may say with Goldsmith, that 'if you find it wondrous short it shall not hold you long.' Mgr. Laflamme, the Rector of the University, was to have met you here to-day, but he is unavoidably

absent, so that in his name and that of the Laval University, of Quebec, ever ready to extend the right hand of fellowship to all seekers after truth, I have the honor and the pleasure of bidding you a hearty welcome and of offering to you the freedom of the museum and all the facilities at our command for the fulfilment of those important duties you have assembled here to perform. Nor is this the first time that these walls have re-echoed the scientific discussions of this Association. One memorable morning thirty-one years ago, when the Confederation which binds together as one the different provinces which comprise this great Dominion of ours, was but a few days old, there met in this building representative medical men from all parts of the country, who did not separate until they had founded the Association which I have now the pleasure of addressing. How well these men did their work, and what life they infused into their offspring is shown by the vigorous condition of this Society, after an existence of more than a quarter of a century. Some of those men are here to-day. Once more, gentlemen, Laval University bids you a hearty welcome and hopes that your stay here will conduce to our improvement, and may also increase your happiness."

After these addresses, which were briefly and appropriately acknowledged by the president, the delegates adjourned to the various museums, which they visited and highly admired, and then all went downstairs to the University gardens, where they were photographed in a group by Mr. Livernois. They then returned to the main hall, where, after some routine business, including the reception of visitors, election of members, etc., the president, J. M. Beausoleil, M.D., Officer of the Academy, delivered the

President's Address.

Gentlemen,—It is now almost thirty-one years since our Association sprang into existence in this hospitable and picturesque city of Quebec. Professional brotherhood then received recognitiou in all quarters of this country. The Canadian medical family was then formed. Now it may march onward to the accomplishment of the object for which it was given life: The promotion of science; the protection of professional interests. A distinguished man, one of the fathers of Confederation, Dr. Tupper—Sir Charles Tupper—was our first President. Since that time, a great number of distinguished physicians have succeeded him in this chair. Indeed, I am greatly confused and moved, though profoundly grateful, when I consider the honor done me by calling me to preside at your meetings, There could have been no question of personal merit; your kindness, gentlemen, directed your choice. I am an admirer and sincere friend of my predecessors, and I desire to follow in their footsteps I ask you, therefore, to allow me for a few moments, to dwell upon that part of our programme, which touches upon: Unity in the Canadian Medical Profession. Gentle-

men,—If there is a profession that requires liberty of practice in any country, it is certainly the profession of the physician. French civil law not being recognized in all the Provinces of the Dominion, it is easy to understand why a lawyer from Quebec may not practise his profession in Ontario; but there is only, and can only be, the same anatomy and the same physiology for all the Provinces; the physician is the same everywhere. Why, therefore, this anomaly, that a Canadian physician may not practice in every quarter of the nation's territory? This country, which is so dear to us, can she not nourish her children without dividing them into castes? Why should a practitioner of Ottawa cease to be a practitioner in Hull? Because the British North America Act reserved to the Provincial Parliaments the right, the exclusive right, to legislate in educational matters. Consequently, instead of one Medical Council for the entire nation, we have as many Medical Corporations as there are federated Provinces; and everywhere, of course, as many different legislative enactments. This lack of uniformity has delayed the accomplishment of our professional unity. Notwithstanding this drawback, it cannot be denied that medical science has made real progress in this young country. A loftier idea of medicine, inspired by more intimate relations with the European schools, has given wonderful stimulus to our institutions. The number of schools has diminished, but the quality of the teaching has been made better. Admission to study has been rendered more difficnlt. The courses, or lectures, consisting of three terms of six months each, have been replaced by lectures which extend over a period of four years. The progress made during twenty years in medical learning has demonstrated the necessity of subdividing the fundamental matters. As a result histology, general pathology, gynæcology, internal and external, pathology, ophthalmology, bacteriology, etc., etc., are the subjects of special teaching. Heated theoretical debates of olden times are now decided in the laboratory positively but calmly. To the glory of our great schools must it be said, their students carry off in a few months, and with marked ability, the diplomas of Paris, of London and of Edinburgh. Every year men of learning from France, Germany, England and the United States honor us by their visits; last year the British Medical Association held its scientific meetings in our midst. A generous rivalry reigns amongst us. In a word, we have reason to be proud of the progress which we have made; and if, as we hope, the march continues onward, if we know how to concentrate our forces, the Canadian Medical Association will make itself felt in the grand scientific movement that stirs the world. At the sight of the results obtained, and in order to obtain these others that we are now seeking, we ought to consider that it is the proper thing to demolish the barriers that divide the Provinces. Is it not time to give free scope to healthy competition? Why any longer place restraint on the legitimate aspirations of our youthful students? Are our medical schools

not tired of the restrictions imposed on the professional liberty of their students? Are our Medical Boards not dissatisfied with the small importance given to the licenses that they confer? Without doubt. And a proof of this is the fact that the majority of the Provinces of Canada have signed the preliminaries of an interprovincial understanding in regard to practice. Our great sister Province of Ontario seemed to desire to remain on the threshold, but she had been stopped, not on account of ill-feeling, but on account of considerations of special legislation, of which she alone could be the judge. To-day she shows excellent dispositions; the Medical Council of that Province has sent a delegation of distinguished men, who are ready, I have no doubt, to bring about the union of the Canadian medical profession. Gentlemen, before ending, I would like to draw the attention of the Interprovincial Registration Committee to the want of preparation of the candidates seeking admission to study medicine. In general, the candidates answer fairly well the questions on languages, history, geography and others, but they are weak in physics, chemistry and natural history. Why should these matters not be the subjects of examination for all the candidates and be of practical value? Such a method would greatly help the work of the student as well as that of the professor. You all know how painful it is to teach a student who is insufficiently grounded. In France a bachelor is only admitted to study medicine after having passed a year in the Faculty of Physical Sciences, and in the Chemical Laboratory, after having also, during that year, studied the natural sciences and passed examination on these matters, that are regarded as elements in the preparation for study of medical science. Without going so far, let us at present profit by the lessons of experience, and endeavor to make easy for our students the noble, but arduous work which they have undertaken. Gentlemen, the considerations that have prevented a great number of physicians from working energetically for the adoption of only one license which would be recognized throughout all Canada are:—(1) Restrictive legislation granted to each Province by Federal agreement. (2) The fear of destroying Provincial autonomy created by this agreement. To the first objection, I answer that it is true the Federal Parliament cannot legislate in educational matters belonging to the Provinces, but a question that interests two or more Provinces, or better still all the Provinces of our Dominion ceases, *ipso facto*, to be a Provincial question; it becomes Federal by the coalition of all the local forces. Who can prevent all the Provinces, united, from obtaining from the Federal Parliament the approbation of their union? Moreover, without adopting this means the Provinces of Manitoba, Quebec and New Brunswick have already enjoyed reciprocity in regard to their licenses; and nobody cried out at the illegality. To the second objection, we may answer that there is no question of destroying Provincial autonomy. In fact, there is nothing to

prevent the maintenance of the local organization whilst, at the same time, allowing it to delegate its powers to some of its members, who would be charged to form a general commission for the whole Dominion. You all know the old saying: "Where there is a will there is a way." Let as understand one another, and it will be easy to make the competent authority understand us. Gentlemen, when we shall have obtained for the whole of British North America a central bureau of admission to study, a board of medical examination for the conferring of a uniform license to practice medicine, then, I say, we shall have come upon an era of progress in the annals of Canadian medicine. Our diploma of practice shall be recognized throughout the whole of the British Empire and will meet with the respect of the scientific world, and the Canadian Medical Association will have deserved well of the country. And your humble President will be happy to find that he had helped, ever so little, in the solution of that great national question: "Unity of Rights and the Freedom of Practice of our Profession."

Upon its conclusion, Dr. Roddick rose and said that in his address the President, whom he sincerely thanked, had touched upon a subject which he himself had long advocated—a general examination and registration common to all the Provinces. He was pleased to-day to find that those whose opposition he had most feared—the men from Ontario—entirely favored the scheme. Accordingly, he hoped at no distant date to see matters so arranged that a man holding a diploma in any one part of Canada might practice in any other part of it, or, in fact, anywhere in the British Empire. Such a consummation would mark a new era in the history of Canada, especially as regards her doctors. The Association had been born in Quebec and had since done great things. He hoped this new idea which had first taken root and been seriously considered in Quebec, would likewise flourish as had the Association, and that this great project might speedily come into operation. He then moved a hearty vote of thanks to the worthy President, which being put to the meeting by Dr. Thorburn, of Toronto, was carried unanimously.

The first paper presented was one by Dr. A. Rosebrugh, of Toronto, on "The Duty of the Medical Profession in the Question of the Treatment of Inebriates." It was read by title by Dr. F. N. G. Starr, of Toronto, the energetic secretary of the Association, in the absence of Dr. Rosebrugh. This paper we will take pleasure in publishing in full in our next issue.

The following committee were named to study and report upon the matter:—Drs. Thorburn, Toronto; Muir, Truro, N.S., and Adami, of Montreal.

The next paper taken up was one by Dr. G. Sterling Ryerson, of Toronto, on "Monocular Diplopia." This difficult optical subject was handled by the author in a masterly and learned manner, which excited general admiration, and it was universally agreed

that, as stated by Dr. Ryerson, the matter was one to which by far too little care and attention were devoted. This paper also we will publish next month.

Hon. Dr. Marcil followed with a paper on "Septic Peritonitis, Consecutive to Appendicitis, and its Surgical Treatment." In his treatise, which was in French, Dr. Marcil gave a most interesting description of the treatment of the disease, consisting of an operation and washing the peritoneum. His opening remarks showed that the operation was first practised in 1893 by Dr. Berger, of Paris, but unsuccessfully. However, he fully succeeded in 1894. In 1893 Dr. Reischel, of Germany, had declared the operation was useless. In 1897 Dr. McCosh, of New York, successfully performed the operation, but in August, 1896, Dr. Marcil himself successfully performed the operation on a young man in Terrebonne and so seems to have fairly earned the credit of having himself performed the first successful operation of the kind on the continent of America.

Dr. Ferd. C. Valentine, of New York, subsequently gave a most interesting and instructive talk on the subject of the Genito-Urinary instruments required by the general practitioner, and illustrated it by a variety of catheters and other apparatus. Dr. Valentine referred in the strongest terms to the fact that most doctors shrink from the expense necessitated by the purchase of the best instruments to treat the dreadful diseases of the organs referred to, and condemned such parsimony in the very strongest terms. If it were not for this, many who are to-day suffering the most horrible torments might be cured, and he hoped that the matter was more intelligently treated here than on the other side of the line. Dr. Valentine has also kindly promised to let us publish his paper next month.

Dr. Smith, of Orangeville, exhibited a number of peculiar gallstones met with in practice, and made a few general remarks concerning them.

One of the most interesting papers of the afternoon, for which we unfortunately have no space at our disposal, was read by Dr. Thorburn, of Toronto, who dealt with "The Physician and Life Insurance." In the course of his remarks Dr. Thorburn mentioned that the risks at present held in Canada by British and Canadian Companies is $344,314,448, and that the total amount held in the United States is $5,183,694,250. The very fact that there was so much money locked up in this business shows how much depends upon the good judgment of the profession, and how much reliance is placed in it. A number of other statistics were also given, but we cannot go into them at greater length. However, in connection with the subject Dr. Thorburn very vigorously protested against physicians permitting either insurance companies or candidates to influence them in their examinations and reports. His appeal was almost purely one for thoroughness and faithfulness in examina-

tion, and he indignantly scored those who so often gave the patient a thump on the back and another on the chest and let them go.

Dr. Mullen made some remarks very much in the same sense.

Dr. Muir also added a vigorous protest *re* those doctors who make unfair examinations, and who treat men banded together in associations at ridiculously low fees.

Dr. Dickson advocated the establishment of a standard and uniform scale of fees for the government of doctors in such cases.

Dr. Gauthier made an extremely warm attack on those doctors who indulge in lodge practice, and claimed that they were prostituting the profession by accepting fees of $1 and even 50 cents for examinations. Some of them, however, even did worse than that, as there was for instance one society he could name in which the candidate did not have to pay if not accepted. He wanted to know, too, how such things could be stopped when the presidents of colleges and medical councils acted in this very manner, and threw out some very broad hints which created quite a sensation. He was in favor of a minimum fee of, say, $5 being established, even if the insurance applied for be only $1,000.

Dr. Valentine apologized for having, though a stranger, interfered in the discussion, but said that he would like to see a more faithful system of examination enforced. There should be a more rigid examination as to gonorrhœa and other diseases of the genito-urinary organs. In Dr. Valentine's opinion 80 per cent. of children who lose their eyesight after birth, and a very large proportion of deaths are due to such diseases. In cases, too, of suicide, etc., he would like to see coroners instructed to examine the genito-urinary organs of the victims, for he was confident that therein the cause would frequently be found. In fact, so strongly was he convinced of this fact that he had some years ago read before the Anglo-American Medical Society at Berlin a paper on the "Melancholia of Gonorrhœa," and of those who then strongly ridiculed him three had since published papers on the same subject.

Dr. Thorburn said that some means of stamping out cheap doctors must be found. However, with regard to Dr. Valentine's remarks, he must say that Canadians do not appear to be nearly so immoral and subject to venereal diseases as those to whom the latter gentleman referred. He was quite confident that gonorrhœa was not by any means the disease most prevalent among Canadians, and that 80 per cent. of premature deaths could not be traced to it in Canada, as they could be in New York, according to Dr. Valentine.

Before the adjournment the election of the Nominating Committee was proceeded with, and resulted as follows:—Dr. Muir, Truro, N.S.; Dr. McNeil, P.E.I.; Langis, New Brunswick; Roddick, Montreal; Bell, Montreal; Small, Ottawa; Ryerson, Toronto; Williams, Ingersoll, Ont.; C. S. Parke, Quebec; Thorburn, Toronto;

Marcil, St. Eustache; Myers, Toronto; Wyatt Johnston, Montreal; Dickson, Toronto; Worthington, Sherbrooke.

The scrutineers appointed were Dr. W. A. Young, Toronto, and Dr. Muir, Truro, N.S.

SECOND DAY—MORNING SESSION.

On Thursday the meeting opened at 9.45 a.m. sharp. The Secretary first read the minutes, after which the regular business was proceeded with.

The following members were added to the attendance roll:—Hon. Dr. Guerin, M.L.A., Montreal; Drs. Frank R. Foster, New York; Henry P. Wright, Ottawa; Pierre Ulderic, Princeville; E. McLaughlin, Morrisburg; Edward Marcotte, St. Basile, Portneuf; A. DeMartigny, Montreal; J. Dufresne, Deschambault; Charles F. Martin, Montreal; C. W. Wilson, Montreal; A. Gandier, Sherbrooke; H. A. Lafleur, Montreal; Sir William Hingston, Montreal.

The first paper read was one by Dr. James Bell, of Montreal. It was, of course, a purely technical one, of little interest to the general public, but valuable in a pathological sense to the profession, the subject being "A series of cases of calculous obstruction of the common bile duct, treated by incision of the duct and removal of the stones."

All those who were present, including the visitors, were loud in their praises of this paper. They also expressed their surprise at the large number of cases of this unusual condition observed in a city of the size of Montreal.

At 10.30 the members adjourned in order to take part in the cursion to the Quarantine Station, which left the Queen's Wharf at 11 a.m.

The trip to Grosse Isle was one of the most pleasant imaginable, and was participated in by fully 200 persons, including a large number of ladies, who lent color and brilliancy to the occasion. The steamer, too, was comfortable and roomy in the extreme, the *Aberdeen* having been courteously placed at the disposal of the Association by the Department of Marine and Fisheries. Commodore J. U. Gregory and Mr. O'Farrel accompanied the party, and did all in their power to promote the general enjoyment, while the members of the local committee were perfectly indefatigable.

At noon a splendid lunch was served on board the *Aberdeen* by Mr. Douglass, who was aided by Mrs. Douglass and a large staff of waiters. It is needless, after mentioning this fact, to state that the luncheon was as fine as anyone could ask for, and it was beautifully served.

Arrived at the Island the visitors inspected the Quarantine Station from beginning to end, including the passengers' quarters, disinfecting and fumigating apparatus, laboratory, etc., and universally pronounced it equal to any on the continent, and a tribute to

the skill and zeal of Dr. Montizambert and his able staff of assistants. The burying ground, too, in which 5,424 victims of the typhus fever plague of 1847 lie buried, was likewise visited, and was viewed with the greatest interest. Shortly before four o'clock the return journey was begun, and as the steamer left the Quarantine Station three hearty cheers were given for Dr. Montizambert, who, with Dr. Church, took the visitors in hand at the Island. After a remarkably pleasant sail the *Aberdeen* returned to Quebec at 6.30 p.m.

On the return trip meetings of the Nomination Committee on International Registration were held, and they then finished their labors.

EVENING SITTING.

Amongst other papers read at the evening sitting was a most interesting one on the "Surgical Treatment of Empyema," by Dr. J. M. Elder, of Montreal. The doctor modestly declined to class his talk as a paper, saying that it was merely an opening of the discussion and grouping of heads upon which he desired to elicit debate and information. The discussion which followed was taken part in by Drs. Muir, Dickson, Hingston and Roddick. Dr. Muir preferred the use of a metal tube to a rubber one, and Dr. Roddick was of a similar opinion. Dr. Hingston believed in operating for chronic cases, and speaking on the subject of washing out the cavity, said that he believed in the washing with sterilized water, or in some cases a mild solution of carbolic acid. Dr. Roddick described his success with the use of the aspirator for children.

Dr. W. H. Drummond read an exceedingly fine paper upon "The Pioneers of Medicine in Quebec," which displayed a vast amount of original historical research. It dealt with the early history of the profession in this country as follows:

Mr. President and Gentlemen,—Meeting as we do, here at Quebec, the very cradle of our nationality, the place and the occasion is, I think, peculiarly appropriate for recalling to your memory a few of the old-time worthies of our profession; the men who were first to plant the Æsculapian banner on the soil of Canada. It is difficult to write or say anything about the ancient city of Quebec without picturing some of the great events which have occurred in her history, for history surrounds us on every side, from the banks of the St. Charles, where Jacques Cartier held his conference with King Donnacona, and erected the sacred emblem of Christianity, to the Plains of Abraham, where fell the gallant Wolfe and the chivalrous Montcalm—but I must forbear, and pass on at once to the subject in hand. It was, indeed, a motley crew that followed in the train of the French merchants, who were first attracted by visions of the fabulous wealth to be acquired in trading with the aborigines of the New World. Warriors fresh from the battle-fields of Europe, men of the proudest

lineage of France, and who had breathed the atmosphere of courts, missionaries whose souls were fired with zeal at the alluring prospect of evangelization awaiting them in the forests of America, and adventurers, daring as ever, followed the standard of William of Normandy. Picture to yourselves, if possible, the harbor of Port Royal, or what is now Nova Scotia, on the morning of July 27th, 1606. There is unusual bustle and excitement down by the shore, where the little ship *Jonas*, commanded by Captain Poutrincourt, is engaged in discharging her complement of passengers, mostly hailing from La Rochelle. Among the band of newly-arrived emigrants there is one sturdy figure, which I want you to study well, for it is the figure of Louis Hebert, the pioneer physician of Nouvelle France. We can imagine this young fellow, fresh and enthusiastic, as he strides along, gazing with curious and occasionally amused eyes on the strange sights surrounding him on every side, and startled when addressed by some wild-looking coureur de bois or fur-trader, whose semi-Indian attire and savage bearing seemed so inharmoniously to blend with the language of France. From what we are told by L'Escarbot, the historian of the expedition, very little, if any serious work was done at Port Royal during the succeeding fall and winter. Hunting and feasting, in which, doubtless, our great-great-grandfather bore his part, were the chief occupation of the little colony, and it was only when the wine and kindred supplies became exhausted that the associates of the *Jonas* dropped into the current setting towards Quebec, and with them drifted in the following spring, Dr. Louis Hebert. Quebec at this time, and even some years before, had been merely a fur-trading centre, frequented by roving bands of Frenchmen, who came to barter with the Indians. Hebert, besides practising his profession of physician, seems also to have been engaged in ordinary business enterprises, for we are told by Abbé Ferland that he "began in 1617 to grub up and clear the ground, which forms the site of the present Catholic Cathedral and Seminary, and constructed a house and the first mill erected in the colony, thus becoming not only the premier citizen of Quebec, but also of Canada." And here it may be well to note that the first time a notary's services were put into requisition in Canada was at the instance of the heirs of Hebert, the physician, thus proving that in this country the profession of medecine antedated that of law. Contemporary with Hebert was the surgeon Bonnerme, who came with Samuel de Champlain, when the latter founded Quebec in 1606. Evidently all was not peace in the camp of Champlain, for shortly after his arrival some of his followers hatched a murderous plot against the life of the great navigator. The scheme, however, leaked out, and the ringleader was arrested, found guilty and executed. In teaching of the children and nursing of the sick, and the faithful manner in which the original intentions have been carried out, even to the present day, entitle the good sisters to a place among the medical pioneers of this Province. In 1690 when

Phipps knocked in vain at the gates of the ancient city, the population under the vigorous administration of Frontenac had increased to 1,500, and education had made considerable advance. The Jesuits College, Seminaire des Missions Etrangers, and Petit Seminaire were on a firm footing, and we find practising at Quebec Drs. Gervase Beaudoin, physician to the Ursuline Nuns, Timothé Roussel, physician to the Hotel Dieu, Nicholas Sarrasin, Jean Leger de la Grange, Armand Dumanin and Pierre du Roy. Of the number Sarrasin was perhaps the most noted. Born in France in 1659 he emigrated to Canada shortly after completing his medical course, and died at Quebec in 1736. He was physician to the king, a member of the Sovereign Council, and published during his long lifetime a number of volumes of natural history, botany and medicine, besides discovering the pitcher-plant, which perpetuates his memory in the name "Saracenia Purpurea." When Peter Kelm, the Swedish botanist, visited Canada in 1749, seven years after the discovery of the Rocky Mountains by La Verendrye, a native Canadian, his constant companion during many a woodland ramble was Dr. Gaulthier, himself an accomplished botanist, and from Dr. Gaulthier, Kelm acquired most of the information which appeared some years later in the shape of two large volumes illustrated with plates. A well-known surgeon who figured during the historic period before and following the conquest of Canada by the British in 1759 was the famous Phillippe Badelard. Badelard was present at the battle of Abraham, and seeing that the French troops to which he was attached were giving way, directed his steps to the rear, where he met a wounded Highlander named Fraser, who was bleeding profusely. The doctor immediately attended to the soldier's injuries and then gave himself up to Fraser as a prisoner of war. Both Dr. Badelard and John Fraser lived to a very advanced age, and ever maintained for each other the closest ties of kindly friendship. Dr. Badelard was a person of most gentlemanly presence and constantly wore a sword, as was customary with the Bourgeoisie de Paris. A contemporary of Badelard, Dr. Arnoux, lived for many years in Quebec, and it was in Arnoux's surgery that Montcalm's wounds were dressed while the great soldier was being borne through St. Louis Gate. Another well-known surgeon of this period, De Lejuste, of the French army, came to Quebec after the fall of Louisburg in 1758, and later among the noted medical men of the Province we find Dr. Francois Blanchet, the father of the first Education Bill in Lower Canada. The cause of education had also in Dr. Jean Baptiste Meilleur an able and successful advocate. Meilleur, who was born in 1796, and died in 1830, had the honor of being the first Superintendent of Public Instruction for Lower Canada, and during his lifetime contributed many articles to *Le Journal de Medicine*. He was also a voluminous writer on geology, botany, agriculture, and other scientific subjects, and took a prominent part in the foundation of L'Assomption College. Dr. Jacques

Labrie, born in 1783, and who graduated at Edinburgh, sat for several years in the Lower Canadian Assembly, and besides doing good work as a medical man, also wrote a "History of Canada," which, while awaiting purchase by the Government, was unfortunately destroyed by fire at St. Benoit during the Rebellion of 1837. The mention of 1837 will recall to the minds of every student of Canadian history the names of at least three members of our profession, who were prominent among the agitators of that stormy period, namely, Nelson, O'Callaghan and Chenier. Wolfred Nelson, although an English-speaking Protestant, warmly espoused what was then termed the national cause, and led the insurgents at the battle of St. Denis, where the British forces were obliged to retreat. Twice he was elected to the Presidency of the Provincial College of Physicians and Surgeons, and he also sat in the Lower Canadian Assembly. He constantly contributed to the medical press articles on preservation of public hygiene, reports on penitentiary prisons, etc., and although he suffered for a while political banishment, yet his genuine disinterestedness and other noble qualities ever retained for him a very large share of public esteem and respect. Dr. Edmund O'Callaghan, a brilliant Irishman, was a member of Parliament, editor of the *Montreal Vindicator*, and author of several historical works. He was also an active participant in the troubles of 1837, after which he took up his abode in the United States, and the gallant Chenier immortalized himself by dying a soldier's death at the battle of St. Eustache. A man who followed the more peaceful paths of life was Dr. Andrew Fernando Holmes, born at Cadiz in 1797. Dr. Holmes, who was one of the foremost medical men of his time, collected while a student in Scotland an extensive herbarium of plants, which later on he presented to McGill University. He was a recognized authority on botany, geology and mineralogy, and contributed many articles on these subjects, as well as writing "The History of Cholera in Montreal." In 1827 he established with others "The Medical Institution," which finally in 1828 merged into that of McGill, of which Dr. Holmes was Dean, and where he lectured on "Practice of Medicine" till the time of his death.

The doctor continued his sketch down to comparatively modern times, dealing with Drs. Wolfred Nelson and Chenier, and with others of as late a date as Drs. Morrin and Marsden, of Quebec.

Election of Officers.

The Nominating Committee reported the following list of officers for the coming year, which was adopted:

President—Dr. Irving H. Cameron, Toronto.

Vice-Presidents—

Prince Edward Island—Dr. J. McLeod, Charlottetown.

Nova Scotia—Dr. Kirkpatrick, Halifax.

New Brunswick—Dr. L. N. Bourque, Moncton.

Vice-Presidents—(*Continued*)
Quebec—Dr. Jas. Bell, Montreal.
Ontario—Dr. J. A. Williams, Ingersoll.
Manitoba—Dr. R. S. Thompson, Deloraine.
North West Territories—Dr. Lindsay, Calgary.
British Columbia—Dr. S. J. Tunstall, Vancouver.
General Secretary—Dr. F. N. G. Starr, Toronto.
Provincial Secretaries—
Prince Edward Island—Dr. S. K. Jenkins, Charlottetown.
Nova Scotia—Dr. W. G. Putnam, Yarmouth.
New Brunswick—Dr. T. D. Walker, St. John.
Quebec—Dr. Charles Marcil, Ste. Eustache.
Ontario—Dr. C. R. Dickson, Toronto.
Manitoba—Dr. George Chigan, Verden.
North West Territories—Dr. Lowe, Regina.
British Columbia—Dr. R. E. Walker, New Westminster.
Treasurer—Dr. H. B. Small, Ottawa.
Publishing Committee—Dr. A. D. Blackader, Montreal; Dr. J. L. Davison, Dr. W. A. Young, Toronto; and the General Secretary and Treasurer.
By-laws—Drs. C. S. Parke, Wyatt Johnston, Jas. Bell, C. R. Dickson, G. S. Ryan, W. W. Dickson, M. Beausoleil, and the President and Secretary.
The next place of meeting is Toronto.

THIRD DAY'S SESSION.

By far the most important meeting of the Canadian Medical Association, so far as general work is concerned, was the closing session, which opened at 9.30 a.m. on Friday, and closed shortly after noon. In this short time an enormous amount of work was achieved, and if all the important measures in which the first steps were then taken are pushed to to their legitimate conclusion, the medical profession, and the public in general, will long have occasion to remember this conference just brought to a close.

The first business of the day was the exhibition by Dr. Laplace, of Philadelphia, of an ingenious instrument for the treatment of bowel wounds, or, to use the technical expression, for intestinal anastomosis. It was exhibited by its use on a chloroformed dog.

Dr. T. D. Reed, of Montreal, was then called upon for his remarks upon "The British Pharmacopœia." He said that it was periodically revised, but that at the last revision in 1885 there were few changes. In that of 1898, however, 189 medicines are omitted, 80 new remedies are added and 180 changes are made. All of this necessitates the very greatest care and attention on the part of the practitioner; it is manifestly important that there should be absolute uniformity in the writing and filling of prescriptions. For this reason then the last corrections to the British

Pharmacopœia must be carefully studied, and it should be adopted as the absolute standard for the Dominion. Accordingly, in view of all these considerations, and the fact that no date has yet been settled for the coming into force of the new British Pharmacopœia, he moved:

That, "whereas a revised edition of the British Pharmacopœia has been issued containing numerous and important changes, and whereas uncertainty exists as to the date when the British Pharmacopœia, 1898, is to be considered in force; *Resolved*,—That the Canadian Medical Association in annual meeting assembled, recommends that October 1, 1898, be taken as the date on and after which, in the absence of instructions otherwise, physicians' prescriptions should be compounded with the preparations of the British Pharmacopœia, 1898."

Dr. Roddick also spoke at some length on the matter and read a communication from Great Britain on the subject, after which he announced his intention to move the appointment of a committee to consider the matter.

Dr. Reed, resuming, said that as this was a Canadian Association it should be loyal to the British Pharmacopœia, and announced his willingness that such a committee should be appointed. In some of the Provinces the British Pharmacopœia was not universally followed, as in Ontario, for instance, though it should be so.

Dr. H. B. Small, of Ottawa, said that the British Pharmacopœia was official in Ontario unless otherwise ordered by the Council, and asked where and when it was not followed in Ontario.

Dr. Reed replied that one instance he had in mind occurred two or three years ago in Ottawa, which was in Ontario, and that it took place in the Department which deals with the adulteration of food, etc. A number of tinctures were bought all over the Dominion to be tested, and though they did not conform with the British Pharmacopœia, they were allowed to pass because they were up to the standard ef the United States Pharmacopœia. Some time ago the sentiment in Montreal was tested by means of post-card circulars, and ninety-nine per cent. of the doctors who replied favored the British Pharmacopœia.

Dr. Beausoleil made a few remarks upon the importance of settling this subject, and hoped that no means of doing so would be neglected.

Dr. MacNeil said that the United States Pharmacopœia included all that was best in the British, French and German Pharmacopœiæ, and that it was very extensive and full of information. If the British Pharmacopœia was to be taken as the standard, it should be consolidated, improved and extended.

Dr. Roddick moved the appointment of the following committee to impress the matter upon the attention of the Federal authorities:—Drs. T. D. Reed and A. D. Blackader, Montreal; H. B. Small, Ottawa; Marois, Quebec; I. H. Cameron, F. N. G. Starr, and J. A. MacCallum, Toronto. This motion was also adopted. The

other very highly important matter which came before the meeting was the report of the Committee on "International Registration."

The report was highly favorable to the project in every respect and not only was it so but it suggested admirable bases for the rapproachment, the report being essentially in the following sense:

I. There shall be accepted for matriculation:—B.A. From any recognized university, or in lieu thereof, first class or Grade A Provincial certificate in any of the Provinces, for teachers' license, or an examination in the following branches, which shall be compulsory and conducted by the various councils of the Educational Departments of each Province, viz.:

1. English grammar, composition, literature and rhetoric.

2. Arithmetic, including vulgar and decimal fractions and extractions of the square and cube root and mensuration.

3. Algebra to the end of quadratic equations.

4. Geometry. First three books of Euclid.

5. Latin. First two books of Virgil's Æneid or three books of Cæsar's Commentary, translation and grammar.

6. Elementary mechanics of solids and fluids composing the elements of statics of dynamics, hydrostatics and elementary chemistry.

7. Canadian and British history with questions in modern geography.

8. Translation and grammar of any two of the following subjects, Greek, French and German.

8. In lieu of the above we also recommend that any student presenting a certificate after examination from the professors of any standard or approved university in Her Majesty's Dominion, of having completed of said university, be accepted in any of the Provinces of Canada, for matriculation and registration.

Fifty per cent. of the marks in every subject shall be required for a pass and 75 per cent. for honors.

II. Professional Education. (*a*) The curriculum of professional studies shall begin after the passing of the matriculation examination and registration, and shall comprise a graded course in the regulation branches of four yearly sessions of not less than eight months in each year.

(*b*) The subjects to be Anatomy, Physiology, Chemistry, Materia Medica, Therapeutics, Practical Anatomy, Histology, Practical Chemistry, Pharmacy, Surgery and Chemical Surgery, Medicine and Clinical Medicine, including diseases of eye, ear, throat and nose, mental diseases, obstetrics, diseases of women and children, medical jurisprudence, toxicology, hygiene, pathology, including bacteriology.

(*c*) That at least twenty-four months out of the graded four years of eight months each be required for attendance in hospital practice.

(*d*) That proof of attendance on not less than six cases of obstetrics and two post mortem examinations be required.

III. Examinations (*a*). All candidates for registration in the various Provinces in addition to having fulfilled the foregoing requirements shall be required to undergo examination before examiners to be appointed in each of the Provinces by their representative councils.

Fifty per cent. shall be required for a pass and 75 per cent. for honors.

IV. Your committee recommend that as soon as the foregoing basis of agreement is ratified by the councils of the various Provinces, each council shall endeavor to secure legislation to authorize the carrying out of the foregoing preliminary and professional curriculum and to embody the following to secure a Board of Examiners for a Dominion qualification, viz.:

"That so soon as the various councils of the Dominion shall establish an Examining Board for the Dominion, conducted by examiners appointed by the Medical Councils of the several Provinces, their candidates passing a successful examination before the said Board and obtaining a certificate to that effect, shall be entitled to registration in the several Provinces of the Dominion on payment of the registration fee, providing he is not guilty of infamous or disgraceful conduct in a professional respect."

Your committee desire to recommend that efforts to ascertain the practicability of Federal legislation leading to the establishment of a central qualification which will place the profession in Canada upon an equal footing with that of Great Britain, and Dr. Roddick be authorized to take the necessary steps in said matter.

We further recommend that this Association shall appoint a committee who shall consider and recommend the details as to the number of examiners to be appointed—the method of conducting examinations, the fees to be charged and other necessary details to bring the aforesaid scheme into active operation, which details the officers of this Association shall with the foregoing send to each of the respective councils for approval.

The committee who had the matter under advisement were: Dr. MacNeil, (P.E.I.), Chairman; Drs. Marcil, Chas. Parke, Marsolais, Roddick, (Quebec); Muir, (Nova Scotia); Williams, Thorburn, Mullins, Henry Wright Wright, (Ontario).

Dr. Ahern moved that the following committee be named to continue the good work already begun:—Drs. MacNeill, P.E.I.; Muir, N.S.; Walker, N.B.; Marcil, Quebec; Bain, N.W.T.; McKechnie, B.C.; Williams, Ontario. This resolution also acknowledged the committee's services, and was unanimously adopted without discussion.

Dr. Graudin moved that type-written copies of the report be sent to the registrars of each Province to be laid before their colleges, and that answers thereto be requested in order to feel the sentiment of the country on the subject.

The papers read at this session included "Sero-Therapy," by Dr. Ed. Leberge, Montreal; Laryngeal Diphtheria, by Dr. Gaudier, Sherbrooke; A case of Strangulated Umbilical Hernia, Dr. Gibson, Belleville; Neurasthenia, Dr. Meyers, Toronto; Goitre, Dr. Dickson, Toronto; Infection and Sero-Therapy, Dr. A. DeMartigny, Montreal.

A letter of congratulation to the Association and its president was read by Dr. F. X. DeMartigny, of Montreal, on behalf of Dr. Guepin and Dr. Loze, of Paris, and Dr. Roddick moved that it be suitably acknowledged.

Dr. F. X. DeMartigny also read some communications from Paris on technical subjects.

The auditors, Drs. Dickson and Marois, then reported on the treasurer's books, showing that the balance from last year was $132, while the receipts this year were $156, making a total of $288.52, of which a balance of $62.40 still remains.

The thanks of the meeting were then unanimously tendered to Dr. Small, in recognition of the able manner in which he had, as treasurer, kept the books.

A vote of thanks was likewise passed to the doctors of Quebec, and especially the local committee, for the handsome manner in which they had received the Convention.

Another very strongly worded motion was also moved, seconded, and unanimously passed, expressing the physicians' high appreciation of their delightful trip to Grosse Isle, and their sense of its magnificent equipment. The mover, Dr. Meyers, of Toronto, dwelt upon the magnificent development made by the station during the last twenty-six years until now it is second to none, and embodied in his motion that the Government should retain Dr. Montizambert as the superintendent of quarantine. He said that almost all that had been done at Grosse Isle was due to Dr. Montizambert, and spoke briefly of his great scholarly attainments, and of the very high stand he took among medical scientists the world over. These remarks were applauded to the echo. Dr. Parke seconded the motion.

Dr. Dickson, of Toronto, moved that the thanks of the Association be tendered to the authorities of Laval University for their splendid building and room.

Dr. Small moved that a vote of thanks be passed to the transportation companies who had carried the members at reduced fare, but suggested that some more convenient means of getting reduction than the bothersome certificate system be sought for.

Dr. Mullen moved that Dr. Beausoleil vacate the chair and that Dr. Roddick act as chairman.

He then proceeded to move a vote of thanks to the highly esteemed President for his efforts on behalf of the Association, which he had so largely contributed towards the success of the meeting, one of the best the Association had ever held. He could well remember the first meeting of the Association, which he

attended, was held at Niagara Falls, and was under the presidency of a Quebec physician, the late Dr. Marsden. Since then he had had the pleasure of knowing many presidents of the Association, and it was with pleasure that he remarked how prominent the men all had been. Having commenced under a Quebec president, it was gratifying for him to now attend under a presiding officer taken from among his French-speaking brethren, one of the most delightful and most successful meetings that the Association had held since its foundation. The motion was warmly seconded by two or three gentlemen and was then put to the house by Dr. Roddick, who transferred the expression of the meeting's feeling to their object.

Dr. Beausoleil made a characteristically happy reply. After thanking the members for the honor they had done him, he addressed himself principally to his French-Canadian brethren, and showed them how foundationless was the assertion that the society was an English one. This idea he desired to correct was all wrong, for the society was essentially Canadian in fact as well as in name. French and English-speaking must unite together, not necessarily in language, but in the effort to promote the general good of the country. That the English-speaking members of the Association were willing to do their share and were eminently fair and just to their confreres was exemplified by the fact that in a committee of fifteen, on which there were two French-speaking members, one had been elected president. At the Kingston meeting every honor that could be asked for by the French-speaking members was accorded them, although they were practically alone, and though their countrymen were only one-fifth of the Dominion's population. Now, the French-Canadians must show by their efforts that they want to maintain Canada's reputation and to keep step with progress, and Quebec Province must realize that though she has long had a tendency to do so, she must not bashfully lag behind the rest of the Dominion, even though she may very exclusively desire to retain some of her legitimate characteristics. Finally, he asked all his French-speaking confreres to rally to Toronto next August, and strongly urged them to busy themselves in securing new members for the Association.

Dr. Dickson, of Pembroke, in a few very neat remarks, proposed a vote of thanks and the usual bonus to the secretary, whom he eulogized in the warmest terms for his assiduous and painstaking, though unassuming, efforts on behalf of the Association. In fact, he attributed much of its success directly to Dr. Starr. In these remarks he was seconded by Drs. Muir, Small, Roddick, Beausoleil, MacNeill and others.

Dr. Starr then read a number of communications, including an invitation to the C.M.A. to send a delegate next month to the annual meeting of the Electro-Therapeutic Association which assembles in Buffalo.

After the consideration of other routine matters three hearty cheers were called for and heartily given for Dr. Parkes, president of the local committee, who so admirably arranged everything for the Association and the gathering broke up to assemble next August in Toronto.

In the afternoon the members were entertained to a very pleasant drive to the Falls of Montmorency, by their confreres of Quebec.

THE MUSEUM.

Amongst the exhibitors of Surgical and Medical Appliances at this year's meeting were such firms as The Jeyes Sanitary Compounds Co., of London and Montreal, H. K. Wampole & Co., Leeming, Miles & Co., B. Lindman, and W. J. Chapman.

Jeyes Sanitary Compounds Co., under the efficient management of W. Braggs, had a most attractive exhibit of that firm's goods, including their refined medical liquor, surgical gauzes, toilet soaps, tooth and soap powder, besides their dog soap and veterinary ointment. Jeys' Refined Medical Liquor is not only a standard article in the surgery and dispensary, but Jeyes' Fluid is a household requisite in the Old Country and Europe, where it has taken the leading place as a reliable and absolutely safe disinfectant and antiseptic. In fact, ever since Koch and Von Esmarch tested this preparation so fully in their laboratory at Berlin, and stated, as the result of their researches, that Jeyes' Fluid destroyed germs in ten minutes which withstood carbolic acid for four days, the profession has accepted it as the very best disinfectant. The company are now putting up a refined quality for surgical and medical purposes, and as this is not only purer, but also less alkaline, it is recommended for professional use. The disinfecting fluid is put up in bottles, and in drums and tins, for general sanitary work, and samples of the different packages were exhibited. The visitors were all greatly pleased with the surgical gauze, which is specially made of pure fabric, and carries a ten per cent. strength of the fluid. A special surgical soap, also of ten per cent. strength, in a handsome case, for the instrument bag, was also admired. Much interest was evinced in the toilet soaps and tooth and soap powder, in which the antiseptic is cunningly blended with perfumes. The Senalia Soap especially came in for praise, while the Tooth Soap Tablets were much admired. The Dog Soap and Veterinary Ointment attracted attention from the lovers of animals, and it appeared that some believers in Jeyes' goods, who had not met with the Dog Soap, were using the fluid in the washing water for their pets and had found it very satisfactory. It may be added that Jeyes' Company (London) are the inventors and sole manufacturers, not only of Jeyes' Fluid and its many preparations, but also of the cruder form, Creolin (registered), and other forms of the antiseptic.

H. K. Wampole & Co. were represented by their efficient and ever courteous Canadian manager, Mr. Frost. This gentleman drew the attention of the visiting physicians especially to Wampole's New Pulverous Pills, which they claim are more easily dissolved in the stomach's juices and more readily digested than any other pill made. Wampole makes up a full line of these pills, and we are glad to know they are rapidly getting a hold in Canada. Besides these goods, they showed a full line of their other excellent preparations, and it was but seldom that this exhibit was not surrounded by a large number of anxious enquirers.

Leeming, Miles & Co., of Montreal, exhibited a magnificent display of Seabury & Johnson's different goods, under the superintendence of Mr. Benedict, who treated all callers with the utmost courtesy. That the name of Seabury & Johnson stands for efficiency, reliability and absolute purity in the line of medicated plasters goes without saying. "S. & J." stamped on anything in that line is all that is required. We predict a steady increasing sale in Canada for those goods.

Mr. Bernard Lindman "tooted" as usual the good qualities of the Wilkinson Truss.

Mr. W. J. Chapman had a very fine exhibit of the latest articles in the surgical instrument line.

Dr. A. McPhedran returned from England on the 22nd of August.

Dr. Gilbert Gordon and his bride are at present in England, but will return in October.

Drs. G. A. Peters, A. Primrose, K. C. McIlwraith, and Mr. Irving Cameron are expected back from Edinburgh this month.

Dr. A. R. Gordon has commenced to build on the corner of Bloor and Huron streets, and expects to occupy his new domicile about February.

We extend our sympathy to Dr. E. J. Barrick, on the sudden death of his daughter, Mrs. Giles, last month. Mrs. Giles was a general favorite, and we know that her father has the sympathy of the entire profession.

Dr. Alexander Pattullo died at his residence, 262 College street, shortly before noon on the 10th ult., after suffering for many months from malignant disease of the liver. Deceased was a well-known practitioner in this city. He came here thirteen years ago from Brampton, where for a number of years he had practiced. Dr. Pattullo was born in the township of Caledon sixty-eight years ago, and after attending school at Brampton, took a course at Varsity, and afterwards graduated from Trinity Medical College. Deceased leaves a widow and two children. He was a cousin of Mr. Andrew Pattullo, M.P.P. The funeral took place on the 12th and was largely attended by city practitioners.

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
EDITOR,
69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.LOND.,
BUSINESS MANAGER,
145 COLLEGE STREET, TORONTO.

Surgery—BRUCE L. RIORDAN, M.D.,C.M., McGill University; M.D. University of Toronto; Surgeon Toronto General Hospital; Surgeon Grand Trunk R.R.; Consulting Surgeon Toronto Home for Incurables; Pension Examiner United States Government, and F. N. G. STARR, M.B., Toronto, Lecturer and Demonstrator in Anatomy, Toronto University; Surgeon to the Out-Door Department Toronto General Hospital and Hospital for Sick Children.

Orthopedic Surgery—B. E. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

Oral Surgery—E. H. Adams, M.D., D.D.S., Toronto.

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Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician, Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTON, M.D., M.R.C.S.Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology, Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P.Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THORBURN, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otology—J. M. MACCALLUM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. IV. TORONTO, SEPTEMBER, 1898. NO. 3.

Editorials.

CHOLERA INFANTUM AND SUMMER DIARRHŒA.

EXPERIENCE obtained in Michigan by Dr. Baker, Secretary of the State Board of Health, shows that cholera infantum and diarrhœa prevail in the months, which follow the hottest months in the year. In the report on vital statistics in Michigan for 1894, the greatest number of deaths from cholera infantum were reported for that year in September, and the greatest number of deaths from diarrhœa in August and September. By far the greater proportion of these deaths occur from causes associated directly and indirectly with the hot weather. It may, therefore, be true that a diseased condition

of the intestines is produced in some children by causes operating during the hot weather of July and August, and that, unless the child dies from a violent attack, it may linger and die later on in September.

Stawel points out that in Melbourne, as in many American cities, diarrhœa becomes epidemic, only when the mean temperature has reached an elevation of 60° F., and no other atmospheric condition can be shown to exert any appreciable influence upon the disease.

Universal experience shows, that infants suckled at the breast do not die in hot weather in the same proportion as bottle-fed infants. It is reasonable to suppose, therefore, that hot weather diarrhœa is largely due to changes in the cow's milk fed to infants. Now, what are these changes, and what relation do they bear to the hot weather?

Dr. Klein, in his Harlen lectures delivered in the summer of 1897, at King's College, London, stated that the bacillus coli communis is frequently present in milk. He says that it is ubiquitous in towns and populous districts, being present in earth, air and water, in food and drink, and even in saliva and sweat. But it is not found on mountains and moors, and so far from its ubiquity elsewhere negativing the theory of its origin (intestine of man or beast), it simply means, that the air and water are nowhere absolutely free from some slight taint. It is the chief cause of the souring and curdling of milk, which, though sterile so long as it is in the udder, becomes inoculated in the act of milking; while milk being the richest of culture media, that sold in the shops teems with bacilli by myriads in the cubic centimetre. If milk passing from the udder of the cow becomes inoculated with bacillus coli through aerial contamination, it would seem unnecessary to mention grosser forms of infection. The soiled hands of a milker or the udder of a cow stained with fæces would, however, be more likely to communicate this bacillus than the air of the dairy. When several infants occupy the same room, the air of that room would probably be saturated with bacillus coli, and this may account for the rather large prevalence of cholera infantum and diarrhœa in overcrowded nurseries. Baginski finds three forms of bacteria in the summer diarrhœa of infants: bacteria coli, bacteria lactis, and a proteus variety. These bacteria are common residents of the alimentary canal; but, under the influence of a high temperature and possibly other agencies yet unknown, they acquire virulent power. The products of these bacteria, ammoniacal in their nature, cause in-

flammatory disturbances, which in time bring about degeneration of the mucous membrane of the intestinal wall, and allow the germs to enter the blood and lymphatics and through these the viscera. Klein's views are easily reconcilable with these. The bacteria coli in the intestine, their normal habitat, are inoffensive; but, lodged in milk at a temperature above 60° F., they produce putrefactive or fermentative changes in the milk and acquire a virulent power. Should this milk be used for the nourishment of an infant, it is capable of producing inflammatory and degenerative changes in the alimentary canal of the recipient.

Hence it should be useful to class cases of summer diarrhœa of infants under the heading of "milk infection," in order to emphasize the etiology of the disease. In Stawel's opinion ileo-colitis is a more correct name for the pathological condition, usually found, than gastro-enteritis. Naturally enough, therefore, irrigation of the large intestine has been found satisfactory; the irrigating fluid usually employed being a weak solution of borax. The vomiting associated with the disease is best treated by thorough lavage. For the condition known as "spurious hydrocephalus" free alcoholic stimulation must be employed. Further, a regimen of boiled water, cooled to a suitable temperature, should be given, to the exclusion of all food, every hour or half hour for eight, twelve or twenty-four hours. This dilutes the irritating secretions, dislodges the debris of decomposing alimentary matter, and eliminates the poison from the system.

J. J. C.

THE PLEBISCITE.

During the current month a vote on the now famous plebiscite will be taken throughout Canada. That the result will be looked forward to by all classes with extreme interest is quite certain, and for obvious reasons. The Canadian Premier has already stated in Parliament that, should a large majority pronounce in favor of abolishing the manufacture and sale of intoxicants in Canada, it will be incumbent on his Government to introduce legislation to secure prohibition. If, on the contrary, the majority of votes cast should be in favor of not interfering with the liquor business, no legislation will be introduced. It would be impossible, of course, to predict the action of the Government if a narrow majority should be recorded on one or the other side of the plebiscite, but probably no change would be made in the existing laws. Physicians, like

other citizens, will form, according to their own leanings, opinions for or against prohibition. We do not propose to show the commercial, manufacturing and revenue-producing advantages of the liquor traffic, as now carried on in Canada, or to describe the injury to different trades, the loss of value in plant, the growth of smuggling and illicit distilling, if this traffic is prohibited. Neither, on the other hand, shall we paint pathological pictures of injuries to the health of those who drink, "not wisely, but too well," the debased condition of the drunkard's family, the moral wreck in which alcohol entombs all that is best and brightest in man, for physicians, more than any class, know the dire effects of the excessive use of alcohol on the human organism. There is, however, one feature of the question which interests physicians in their professional relations. There is nothing to say against abstinence from alcohol. Many physicians order it but rarely, and then only for a specified time. On the other hand, there need be no objection to people using alcohol, provided they have sufficient good sense to know when to stop. Assuming, however, that an inebriate has been won from his bad habits and has renounced alcohol in every form, he certainly has a right to get pure water. We think that a great deal of the fervid energy, displayed by the teetotallers in decrying the evils of alcohol, should be converted into a force, working for the purification of our domestic water supplies. Personally, we know of an instance in the family of a physician, living in a town in Ontario, in which ale was taken at meals, owing to the impurity of the town water supply. Ale, being made from a boiled water, has certainly a hygienic advantage over an impure or suspected water, when the probability of taking typhoid fever from the latter is considered.

It would, certainly, be of great service to the cause of sanitation and general good health, if the water supplies of Ontario were in every instance perfectly pure. Cold tea may be safe, but it is responsible for a good deal of dyspepsia, and most housewives will acknowledge, that a grumbling dyspeptic is almost as great a curse in a household as the chronic drunkard, for the latter is, at all events, speechless occasionally.

In the Ontario Health Act, chapter 248, section 30, it is stated, that wherever the establishment of a public water supply is contemplated by the Council of any city, town or village, approval of the plans, source of supply, etc., must be obtained from the Provincial Board of Health. Now, in a large proportion of the

745 municipalities of Ontario the domestic water supplies are rendered impure by preventable sources of contamination. Teetotallers, many of whom are in public life, are largely represented in the municipal councils. Let them agitate for pure water. The doing away with surface wells and the securing of an improved water supply for a municipality will cost a little money; but, if teetotallers take an active part in bringing such a work to completion, they will convince physicians and sanitarians that their crusade against alcohol is sincere, and that they really mean to popularize water instead of beer. J. J. C.

NERVY, TO SAY THE LEAST OF IT.

It has always been understood that members of the medical profession, in making original research in any branch of medicine, gave the results of such work to the world for the sake of suffering humanity. It has, however, recently come to light that one man, for the sake of filthy lucre, has proven an exception to the rule. We refer to Emil Behring, of the Faderland. For some years he has been attempting to secure from the United States Government a patent covering the manufacture of diphtheria antitoxin, claiming to be the original discoverer of this form of treatment. On every application he has been promptly refused, and justly so; but for some unaccountable reason, in June of this year he was granted the privilege asked for, and has now served the manufacturers of diphtheria antitoxin all over the United States with notice to stop the manufacture of this article, and, in fact, to at once shut the doors of their laboratories and allow to go to loss the hundreds of thousands of dollars already expended by them in this direction. In doing so we suppose that he thinks he is acting within his rights; but how it comes that the Government at Washington could possibly give to one man or firm such an unjust exclusive monopoly is beyond our comprehension, especially so when it has been long ere this proven that if any one man could claim to be the original discoverer of immunizing against disease such belongs to Pasteur. What Behring claims as his invention is:

"1. A process of producing diphtheria antitoxin, which consists in inoculating horses or other animals capable of being infected with diphtheria with repeated doses of diphtheria poison or living diphtheria bacilli of gradually increasing quantity and strength so

as to immunize them and form in the blood a counter-poison for destroying the poison secreted by said bacilli, drawing off the blood from said animals, separating the serum from the blood corpuscles, and concentrating the former for use substantially as set forth.

"2. As a new substance, diphtheria antitoxin, consisting of the concentrated serum of the blood of animals treated with diphtheria poison and having the characteristic of immunizing test animals against infection with diphtheria, and curing them when artificially infected with diphtheria, said serum containing a counter-poison having the property of destroying the poison secreted by the diphtheria bacilli substantially as set forth."

That Behring's claim to such is humbug is perfectly plain, as the principles of immunization to diphtheria were laid down by many long before his name came to the front, the basis of this work being undoubtedly laid, as we have already said, by the immortal Pasteur, when he first gave to the profession his method of immunizing against Anthrax, as Dr. F. W. Mann points out in his editorial appearing in the *Medical Age*:

"So long ago as 1887 Sewall immunized pigeons against the poison of rattlesnakes. He says, with genuine modesty, his work was undertaken with the hope that it might form a worthy contribution to the theory of prophylaxis, and it was a most worthy contribution. In 1887 Roux and Chamberland immunized animals against malignant œdema with sterilized anthrax cultures. In 1890, the same year in which Behring and Kitasato published their results in immunizing animals against diphtheria and tetanus, Fraenkel published his results in diphtheria after treating animals by weakened germs and filtered cultures. In the clinical uses of the serum Aronson's name must not be forgotten. His serum was first used in the Children's Hospital at Berlin in 1894. The serum of Roux had been used in one of the hospitals of Paris a month earlier than Aronson's in Germany. Emerich and Aronson both dispute the priority of Behring, and the French Academy of Sciences awarded their prize for antitoxin jointly to Behring and Roux, a fact which very clearly denotes the difficulty of estimating priority of merit in a scientific struggle in which the numerous competitors were so equally distinguished."

To think that one firm would have the temerity to attempt to shut the laboratory doors of those firms in the United States who have for years been turning out such excellent antitoxin savors too strongly of injustice. We are glad to know that the manufacturers have entered vigorous protest in this matter and will fight the case to the highest courts. We are informed that medical men need not have the slightest fear about the use

of serums made in the United States, as the manufacturers will protect the profession at their own expense to the very last.

We cannot forbear quoting the apt and eloquent words in which Dr. Warren sums up this whole matter:

"If Professor Behring admits any merit in the work of his predecessors and contemporaries, his claim to be the exclusive inventor of diphtheria antitoxin is in contravention of all the ethics of a scientist's career. His claim is an offence against common morality. Had Simpson patented chloroform anæsthesia, or had Lister patented antiseptic surgery, the world would have had two selfish empirics, and lost two medical heroes. If Behring, by the righteous judgment of mankind, can be adjudged sole and undisputed inventor of antitoxin, he has a place in the Temple of Fame for achieving the most beneficent discovery of modern times. It remains to be seen whether the temptation to be rich will overcome the ambition to be great, and whether for a tinsel crown he will barter a diadem of everlasting renown." W. A. Y.

CANADIAN MEDICAL ASSOCIATION AT QUEBEC.

Ah, mighty splendor unsurpassed—
Yet sight of land is sweet at last,
And sweet at early morn
To wake, and from the crowded deck
Behold the proud walls of Quebec
And land where I was born.

Ezra H. Stafford.

A jaunt to French Canada is always a delight to "upper" Canadians. The sail to Montreal, our courteous reception, and the luncheon tendered by the staff of the General Hospital there were unalloyed pleasures. Then, on by boat again at night, to open our sleepy eyes next morning to find Point Levis on the one side and the grim old Citadel on the other, alike claiming our admiration as the early sunshine touched and tinted their sombre greyness. Quebec is beautiful in its quaintness, historic and interesting, a wondrous place for the artist and his humbler friend the camera fiend, and many of our delegates found stray hours between the sessions to indulge in snap shots and enjoy some funny *contretemps* which, when afterwards related, made even the tapestried walls of Chateau Frontenac resound with laughter.

We all visited Montmorency Falls. We enjoyed a garden party kindly given in our honor at Parent Park, *after* we got there, but owing to the darkness of the night and the state of repair of a portion of the road, it proved (as the darkeys used to sing) "a hard

road to trabel." One of the party, a Toronto physician, for whos brightness we thanked the fates (as we came to a halt before the junction of car tracks, earth, rock and general debris), called out to a *habitant* who was passing: "*Garcon, pensez vous que nous sommes —— acrobats?*" The doctor *said* what we *thought*. The trip to Grosse Isle, the quarantine station, was as interesting as unusual. Dr. Montizambert, of Toronto, the quarantine officer (who resides on the Isle all summer) was courtesy personified, and placed himself at

The Monument erected on Grosse Isle, St. Lawrence River, to the memory of the Physicians who died in the discharge of their duty in the Plague of 1847.

our entire service. The arrangements for the landing of infected passengers from the steamers, and the provision made for the comfort of "suspects," seem about perfect. The way the clothing is disinfected by superheated steam, the bichloride spraying of the persons of the passengers, the disinfection by formaldehyde of such articles of apparel as would be injured by being exposed to so high a temperature as that necessitated by the steam process, also numerous minor precautions resorted to, were indeed well worth seeing.

Perhaps the only moment of sadness experienced by any of our jolly party was when we visited the graveyard (on Grosse Isle) with its monument to the 5,424 emigrants, victims of the typhus fever and cholera plague in the awful summer of '47. Well might we stand uncovered also beside the last resting place of the physicians whose simple epitaph is, "Died, in the discharge of their duty—of typhus fever." All honor to those who have perished, standing sentinel between our great floating cities and our busy centres of teeming life, to protect and guard from the spreading of the dread plague.

With the closing of the meeting of the Canadian Medical Association (the success of which was largely due to the executive ability and untiring efforts of the General Secretary, Dr. F. N. G. Starr) we say adieu to medical conventions for this season. We have met and profited by what we have learned, and also have enjoyed muchmeeting once again our confreres and the friends of student days from near and far. Now to work again, conscious that "to-morrow will bring another day."

W. A. Y.

DIAGNOSIS SHOULD PRECEDE TREATMENT IN SORE THROAT.

Successful treatment requires careful diagnosis, and this rule applies with great force in the varied forms of sore throat. To treat a sore throat intelligently, the invading germ, if there be one, should be recognized, and the therapeutic agents adjusted accordingly. If, for instance, the organisms present are staphylococci, which cause fever, the indications are a mixture containing tr. aconiti and sulphate of magnesia; if streptococci, which cause pain, the principal indications are soothing applications to relieve the pain and destroy the germs, such as gargles containing Labarraque's solution of the strength of 50 parts to 1000 of water, or a one per cent. solution of chloral. If the Klebs-Lœfler bacillus is the invading germ, antitoxin diphtheriæ should be injected immediately, and this will often bring on the crisis of the disease in twenty-four hours. If the Klebs-Lœfler bacillus is associated with the streptococcus in its invasion there will be a long, hard fight. Antitoxin diphtheriæ should then be used before ptomaine poisoning, which arises from the Klebs-Lœfler bacillus, has appeared. The early discovery of the Klebs-Lœfler bacillus is of the greatest importance. When dis-

covered, whether alone or in association with other organisms, antitoxin diphtheriæ is the proper remedy, and should be used immediately. While it is true that antitoxin diphtheriæ can be used with confidence to neutralize the virus of the Klebs-Lœfler bacillus, it can do no good in most, and is positively harmful in some cases of streptococcus angina. The toxin developed by the streptococcus is usually of small importance, and, as already stated, the indications called for are soothing applications to the seat of the disease, which relieve the pain and destroy the germs. It thus appears that, in the treatment of the various forms of infectious sore throat, the scientific examination of throat membrane or secretion by the bacteriologist is of the first importance, and should be made as soon as possible, if successful results are to be obtained.

J. J. C.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

In our last issue we called the attention of the reading portion of the profession to this library which has now been in existence for the last ten or eleven years. Though first contemplated by a few of our prominent Toronto confreres, it has been a Provincial library from the beginning. The Ontario Medical Association, in recognition of its advantage to the profession throughout the Province, has shown its fraternal interest by voting a substantial bonus each year. Long may it continue to do so; and be an annual reminder to every one of us that we too may do something to encourage an institution whose only aim is the advancement, not only of the actual members of the Association, but also of the individual members of the profession throughout the Province. In fact, our provincial brethren are treated in a more liberal manner than are the city members of the Association; while the latter are compelled to subscribe for stock in the Association and pay an annual fee, the former have only to write to the librarian and ask for any book or books on the shelves, all the cost entailed being the boxing and express. In this way any physician in good standing may consult the authorities on any subject at the cost of a trifle. Who among us would not give considerable to have at our service the latest literature upon puzzling cases which turn up every few months. The library with its four or five thousand complete volumes, and its list of monthly and weekly journals, offers the opportunity which we trust our rural and urban readers will promptly and persistently take advantage of.

A CORRECTION.

In the "Correspondence" column, page 115, of the August issue of the Journal appeared a letter, signed "Practitioner," in which reference was made to the name of Dr. J. E. Elliott, of this city, appearing upon a card alongside of a telephone in one of Toronto's business houses. We are now informed that the card in question was printed at the instance of an Accident Insurance Company, of which Dr. Elliott is a salaried official. In that capacity it is his duty to investigate promptly all cases of accident in which the Company is interested. Dr. Elliott states that the card was printed by the Company and handed to the employers of labor, who are insured with it, without his knowledge and that it was in no sense an "advertisement." It was simply for the private use and convenience of the Company and its policy-holders. We are pleased to make the correction so as to remove any misapprehension in the matter.

The Physician's Library.

BOOK REVIEWS.

Diseases of Women. A Text-book for Students and Practitioners. By J. C. Webster, B.A., M.D.Ed., F.R.C.P.Ed., F.R.S.Ed.; Demonstrator of Gynecology, McGill University; Assistant Gynecologist, Royal Victoria Hospital, etc., etc.

After a study of Howard Kelly's masterful work on "Operative Gynecology," one looks somewhat askance at any other contemporary work on "diseases of women," but being attracted to the above volume on account of its Canadian authorship—the writer being a teacher in a Canadian University—one is most agreeably and pleasantly surprised after a careful perusal of its interesting and practical pages. The author has certainly proved himself both an original investigator and a skilful compiler in one of the most important branches of our profession. It is really an admirable book, and we predict for it a great and deserved popularity. The work is written in clear and concise English, the arrangement of the various subjects is excellent, it is practical in its details as regards treatment, and it will be of material advantage to the general practitioner as well as a useful text-book for students. At the same time it is thoroughly scientific and up to date, and will be read with interest and advantage by the specialist.

The book is thoughtfully and appropriately dedicated to Dr. William Gardener, the accomplished gynecologist and distinguished professor of McGill College. The objects of the book are set forth in the preface and are fully carried out in the text. Careful and special attention has been given to anatomy, physiology, embryology, pathology and bacteriology, in so far as these bear on diseases of woman; and many of the facts related are the result of original investigations by the author. This, however, would be expected from one who has been awarded the "First Research" prize of the Royal College of Physicians, Edinburgh.

The chapter on "Puberty, the Climacteric and the Disturbances of Menstruation," is worthy of careful study and reflection. Several pages have been devoted to "case-taking," and should be mastered by every student and practitioner. The description of minor surgical measures and instruments is excellent. We observe, however, in referring to the use of the curette, that no caution is given as to the danger of perforating the uterus, an accident we have known to happen in the hands of skilful gynecologists. Preference is also given to Roux's curette. We cannot but think, however, that the perforated instrument which allows irrigation of the uterine cavity during the curetting, washing away the debris at the same time, and doing away with the subsequent use of the double catheter as recommended, is preferable. The aseptic technique, so necessary to successful gynecological work, has been given all the importance and attention absolutely required in a modern scientific work, and the chapter on operative measures is one of the best in the book.

The chapters on "Peritonitis," "Pelvic Cellulitis," "Pelvic Hæmatocele" and "Hæmatoma," are concise, reliable and practical, as is also that portion of the work devoted to the study of affections of the tubes and ovaries. In affections of the uterus, especially in reference to lacerations and injuries of the cervix, in order to avoid "the mistakes of the school whose motto is Michelet's dogma, *Le bassin c'est la femme*," the author reaches the other extreme, when he states that repair of cervical lacerations are rarely needed. This statement will possibly account for the poor and meagre description of the operation necessary for the repair of this lesion. An inexperienced operator would have great difficulty in understanding the necessary procedure from the description given, whilst the diagram would only add to the perplexity. In the treatment of stenosis of the cervical canal, no mention is made of any of the intra-uterine drainage tubes, which are of so much value in preventing contraction and avoiding the after use of Hegais or other dilators. In repairs of the perinæum no reference is made either to Tait's or Emmet's special operations, and the operation described is not obviously intelligible, but the chapters on "Uterine Fibroids" and "Carcinoma" are very complete, the operative details being minute and clear.

Kelly's special work in vesical and ureteral affections is given due consideration, and his methods of examination are intelligently described, but no mention is made of the proctoscope or sigmoidoscope—valuable instruments in the study of rectal affections.

We congratulate the profession of Canada upon the acquisition of such a scientific, practical and up-to-date work—a work which maintains a high standard throughout. We believe the book is destined to go through many editions, and should be in the hands of every progressive Canadian student and practitioner.

G. T. McK.

Masters of Medicine—Sir Benjamin Collins Brodie. By Timothy Holmes, M.A., F.R.C.S. New York: Longmans, Green & Co., 91-93 Fifth Ave.

One of the noticeable features of this century has been the desire of the reading public for biographical sketches of celebrated men. To physicians it is a privilege as well as a pleasure to have in this series, "Masters of Medicine," an opportunity to study the lives of those who occupied the places of honor in their chosen profession. After the author of this sketch has safely perched Benjamin Brodie in his place on the "family tree," and surrounded him with innumerable "cousins and aunts" in true Scotch style—for has not Sir Walter Scott said, "Every Scottish man has a pedigree. It is a national prerogative, as unalienable as his pride and his poverty"?—the perusal of the book becomes interesting. The parental sternness and insistence of attention to study, and the choice of his profession for him by the same stern parent, makes "Benjamin Brodie" quaint reading for the youthful student of to-day whose most remote idea is to even consult "the pater" as to his destiny, let alone deviate from the dictates of his own sweet will. At the beginning of his study of medicine, Benjamin Brodie evinced for it a positive aversion, and one wonders

greatly at his dogged perseverance in a study so obnoxious to his tastes. But diligence brought its own reward, and his former aversion turned to enthusiasm as success after success crowned his efforts, bringing him into great prominence in the Royal Society, as a lecturer, writer, and later as physician to the king. In entertaining detail his friends (many titled and prominent persons) and confreres in medicine are introduced to the reader, and frequent references made to his writings. Financially also he was very successful. When only thirty-nine years of age his income had risen to £6,500, and for many years went on steadily increasing. The closing years of his life were full of sadness. His wife died after forty-five years of happy comradeship. While still active in brain and body his life ended in loneliness and blindness, in 1862. W. A. Y.

A System of Medicine by Many Writers. Edited by Thomas Clifford Allbutt, M.A., M.D., LL.D., F.R.C.P., F.R.S., F.L.S., F.S.A., Regius Professor of Physic in the University of Cambridge ; Fellow of Gonville and Caius College. Vol. III. London : Macmillan Co., Limited. New York : The Macmillan & Co., 1897. Toronto : A. P. Watts & Co., College Street.

Volume III of Allbutt is more than ordinarily interesting, consisting as it does of "Diseases of the Stomach and Bowels." The book is divided into 1st, General Diseases of Obscure Causation. Under that heading the article on Acute Rheumatism is written by Drs. Church and Cheadle ; Chronic, Muscular and Gonorrhœal Rheumatism is written by Dr. Archibald Garrod ; Rheumatoid Arthritis, by Drs. Kent Spender and A. Garrod, and that same disease in children by Dr. Still ; Dr. Cheadle contributes a chapter on Rickets, and W. Bowlby articles an Osteomalacia, Osteitis Deformans, Acromegaly and Osteo Arthropathy. Gout is dealt with by Sir William Roberts ; Diabetes Mellitus, by Dr. Saundby ; Diabetes Insipidus, by the late Dr. Ralfe ; and Hardaceous Disease by Dr. Howship Dickinson. Under the heading of (2) "Diseases of Alimentation and Excretion," Drs. Ralfe and Fenwick have an article on the General Pathology of Digestion, while Dr. R. Bradford deals with the General Pathology of Secretion. Dr. Dobbett has written a most lucid chapter on Shock and Collapse ; Diseases of the Mouth and Œsophagus have been written by Dr. W. A. Wills and Dr. Fenwick. Under the heading of "Diseases of the Stomach," the principal contributors are Drs. Lauder Brunton, Fenwick, Stocker, and the author himself. Dr. Playfair has written a most instructive chapter entitled Abdominal Diagnosis, from a gynæcological standpoint. This chapter in itself is well worth the price of the volume. Dr. Treves contributes an article on Enteroptosis, as also one on Acute Peritonitis under the heading of Diseases of the Peritoneum. "Diseases of the Bowels" include such writers as Lauder Brunton, H. D. Rolleston, Hale White, Eustace Smith, Patrick Manson, and Dr. Allingham. Volume III is fully up to, and, in some respects, ahead of the first and second.

Lectures on Mental Diseases. By Henry Putnam Stearns, A.M., M.D. Philadelphia : Blakiston & Co. 1898.

In this admirable work the author has very succinctly covered the whole field of nervous disease as generally so accepted ; and by omitting a few of the more doubtful forms of derangement, or those whose actual place is not established, has saved the inexperienced reader from the inevitable confusion into which a perusal of some works upon the subject immediately plunges the uninspired. Paranoia, the perversions and syphilitic insanity are not mentioned, and neither is phthisical insanity ; but there are several chapters upon paralytic dementia and epilepsy, and all the forms of insanity usually met with in hospitals for insane receive full and careful treatment. It would be hard, for example, to imagine any one reading the masterly description of paresis in this book without forming once and for all a clear clinical picture of that little understood disease. The author does not give way to the anecdotal impulse which carries so many similar authors so far a-sea from their subject and fills such a multitude of pages. An undigested, uncrystallized quagmire of little

stories and puerile recollections may be very interesting to the writer of such gossip, but it is not necessarily of profound scientific value. There are a number of cases described in the present volume—cases graphically and minutely set down—but no little stories. As good and as satisfactory a book upon the subject one seldom comes across—a better one would have to be very good, indeed. E. H. S.

Atlas and Epitome of Operative Surgery. By Dr. Otto Zuckerkandl, Privat docent in the University of Vienna ; authorized translation from the German. Edited by J. Chalmers DaCosta, M.D., Clinical Professor of Surgery in Jefferson Medical College, Philadelphia ; Surgeon to the Philadelphia Hospital, etc. With 24 colored plates and 217 illustrations in the text. Philadelphia : W. B. Saunders, 925 Walnut Street, 1898. Toronto : J. A. Carveth & Co.

Our readers already are aware as to what opinion we hold regarding the previous numbers of this series of atlases. That each one of them has been almost superior to the last is a fact, and that Dr. Zuckerkandl has in this epitome of operative surgery excelled himself cannot be gainsaid. To a surgeon, a work of this kind with its plates, will be of marvellous assistance in freshening his memory just before going to the operating room, helping him to carry a mind picture as to the various styles of the work before him.

Lectures on Tumors. By John B. Hamilton, M.D., LL.D., Professor of Surgery, Rush Medical College and Chicago Polyclinic ; Surgeon to The Presbyterian Hospital ; Consulting Surgeon to St. Joseph's Hospital, etc., etc. Third edition, 21 illustrations. Philadelphia : P. Blakiston's Son & Co., 1012 Walnut Street, 1898.

Dr. Hamilton very wisely decided to publish this, a third, edition to his manual, owing to the rearrangement of tumors as made not long ago by the Royal College of Physicians and since adopted by the American Medical Association,. His work does not pretend to be a work going into operative surgery in any way, but, on the other hand, one dealing solely with tumors and their pathology. It really consists of a series of lectures delivered before Georgetown University and afterwards Rush Medical College.

MAGAZINES RECEIVED.

Scribner's Magazine for September contains the following articles : "The Rough-Riders' Fight at Guasimas." Illustrations from photographs taken for *Scribner's Magazine*, and drawings by H. C. Christy. "The Santiago Campaign :" Some Episodes. Illustrations from drawings and photographs by H. C. Christy. A Wounded Correspondent's Recollections of Guasimas—How the Spaniards Fought at Caney—An Artist at El Poso. "A War-ship Community." Illustrations from photgraphs taken on the San Francisco, Indiana, Brooklyn, New York and Massachusetts. "Mutiny on the Flagship," a naval story. "A New York Day—Noon." Drawings by C. D. Gibson. Luncheon—The May Queen. "On the Sidewalks of New York :" Upper Broadway at Noon. "The Conscience of a Business Man ;" illustrations by A. B. Frost. "The Workers—The West ;" VI : A Road Builder on the World's Fair Grounds ; illustrations by W. R. Leigh. "Dizaine." "The Story of the Revolution :" Greene's Campaign in the South. (To continue through the year.) Illustrated with drawings by Howard Pyle, E. C. Peixotto, F. C. Yohn, and with portraits. Decorations by the author. "Red Rock :" A Chronicle of Reconstruction. Chapters XXXII.—XXXVI. With illustrations by B. West Clinedinst. "The Jungfrau Railway ;" with illustrations. "The Point of View :" The Future of Scenery—The Question of "Living Longer"—Enter, the Mothers. "TheField of Art :" Newly Discovered Refinements in Architecture. (W. H. Goodyear).

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Original Contributions.

A MEDICAL ITINERARY: BEING AN ACCOUNT OF A SAIL THROUGH THE SACRED ISLANDS.

BY EZRA HURLBURT STAFFORD, M.B.,
First Assistant Physician, Asylum for Insane, Toronto.

FROM very ancient times it has, I believe, been the custom for eminent doctors of physic to advise the waters of various natural springs for those of their patients who were sufficiently affluent to indulge in such luxuries. The results were often very satisfactory, it is said, and the benefit experienced was usually attributed to the peculiar properties of the waters.

More recently the climate of a few favored regions has for a number of empirical reasons been advised in a similar manner; and the results of a pilgrimage to one or other of these climates has been said to be beneficial in much the same way as a sojourn at the mineral springs. It has possibly been noticed that the benefit derived is often proportionate to the remoteness of the locality selected or the expense attending the undertaking. The ability to drink profusely of alkaline or ferruginous waters a long way off, and to bathe lavishly in the same, came in time to be regarded as a reasonable sign of wealth; and the very word "Springs" eventually grew to be a synonym for all, or at least for a good deal, that was very respectable.

In the choice of a climate, popular practice reached a similar culmination, and in Europe, Italy and the Riviera were considered excellent resorts for wealthy (and feeble) English people; while in America, Florida, the Bermudas and California enjoyed a like preference.

While not for a moment questioning the fact that benefit may be derived from mineral waters and Elysian climates in general, the writer has so frequently observed results quite as satisfactory obtained under altogether different circumstances that he has no hesitation in pressing the point that the chemical qualities of the mineral waters in question, and the particular temperature and specific gravity of the air of a certain climate, are to some extent purely incidental; and that it is not the copious potations indulged in by the conscientious patient at the springs which serve to recuperate his fallen energies, so much as the abrupt and sometimes total disadjustment of a series of habits (frequently luxurious) which, with rest and change, facilitates the processes of constitutional repair.

The life of all men, in whatever rank, from the lowest to the highest, tends to become a routine. Nature, when forced into a diagram, loses its strength; and as artificial conditions become more marked, the first signs of degeneration are developed. Thus the leisure classes, when they go to Tunbridge Wells or to Nice, are drawn away for a time from the routine of sated luxury which would eventually lead to their utter degeneration, and in the complete change find in reality the benefit, *cæteris paribus*, which they attribute, with puerile reasoning, to a certain mineral water or a special climate.

This is, of course, all very well for the opulent members of the privileged classes; but if a brief emancipation from the dismal routine of modern life is after all the secret, in great part, of their physical restoration; why should not the classes who find themselves in narrowed circumstances take advantage of the same principle, and, in a similar manner, though with perhaps less splendor and ostentation of respectability, create a "fault" in the diagrammatic strata of their irksome lives; and, regardless of climate or springs, receive similar benfit from the *disadjustment of habit* which is open to them quite as much, thank Fate, as to the complacent millionaire?

All practitioners are familiar with that poor drudge who denies herself the necessities and even the decencies of life, that a tuberculous husband may, as a *dernier resort*, go to Colorado Springs, or winter in Bermuda—aye, and with the half-starved, haggard girls also, who, at the imperious mandate of the enlightened physician, have sent the luminous elder brother (who was probably studying at the theological college, also at their expense—studied too hard, they generally say) to St. Augustine, and are facing the difficult task of keeping that highly gifted individual there—and subsisting themselves at home.

As a matter of fact, one of the most thriving industries in a number of these remote and expensive places is the manufacture and sale of tombstones. In the case of a large number it is both ridiculous and criminal of the physician to dispatch the patient thither. As for those more favored, they might possibly have been

treated at home, or if not at home, certainly with results equally cheering at a score of less renowned places within easy hail of their home and friends. The success of a very large number of both mineral water and climatic resorts is based in a spirit of unmitigated professional charlatanism, as Guy de Maupassant has pointed out with such inimitable derision in Mont Oriol.

The Province of Ontario alone offers within its confines all the geographical variety that any physician really needs; and while destined possibly to furnish acceptable summer resorts to less favored portions of the continent, may in the hands of the conscientious and sane physician, be studied to a more philanthropic purpose —I mean as a salubrious region for the treatment of the sick.

Convinced of this, and in a laudable spirit of inquiry, I lately decided to occupy my "studious leisure" with a scientific reconnaissance of some of the wilder regions of this province, and with the happy result that I can now authoritatively put forward the following itinerary as a satisfactory equivalent to the most delightfully remote and gravely expensive resorts known to fame, for one who feels ill enough to long for such healing (and aristocratic) haunts, but lacks time, and perhaps something else, for the experiment. Conscious that I am conferring a great benefit upon the human race, I have hastened in rather untechnical language, and with many idle digressions, I fear, to set down in writing a careful statement of the itinerary referred to. I regret to say that in my description of the regions explored it was not possible to retain the ponderous dignity usually observed by scientific writers upon this subject. This fault was not, however, so much mine as that of the subject.

Imprimis, I shall always be glad that I decided to wheel to the port of departure, rather than use the railway ticket which had been provided, for the long ride through the summer fields in the moonlight was a very pleasant experience, and it was on the highway, moreover, that I chanced to meet a friend who was afterwards my companion through the whole voyage. He was an unfortunate youth, and was having a good deal of trouble all by himself with the tires of his wheel.

I believe people have been known to be speechless with rage upon such occasions, but in the present instance I did not notice this phenomenon. In fact, I heard what he said. He did not want to be speechless. Having given him (though much shocked by the violence of his language) considerable aid, in the form of advice and cement, the grateful young man clove to me out of sheer gratitude, and the tire having been repaired, we rode away in the early morning dusk together. His name was Johan.

I was destined presently to succor him for a second time. It seems that he had (without medical advice) partaken of a large number of apples in that stage of maturity usually noticed early in July; and he began to complain straightway of a second complication, nearer home than the tire. I began to think that he was

very unfortunate. His little tour did not seem to be beginning auspiciously. Moreover, it might interest the neurologist to know that he had a tendency to plunge awkwardly off his wheel and lie down flat on the ground. Adam himself could not have remembered with greater repugnance the apple which he had eaten, nor have blamed his own folly more bitterly, when it was too late to nourish prudent thoughts.

I told the melancholy young man that he would catch cold —an admonition very popular with the laity; but advice did not act as a very powerful stimulus, so, as a last resort, I awakened a neighboring farmer, and at his suggestion gave the sick youth some salt and water—not very much salt. The farmer said that a pound would make a cow feel better, so being only a man, we merely gave him half a pound. But the farmer's wife, who had joined us as soon as she could arrange her attire, did not seem to think this wise, and the patient eagerly agreed with her that it was not. Somewhat hurt in our minds, the husbandman and I left the sick youth to her, and she promptly administered some forty drops of horse liniment in hot water and rum. She said it ought to be rather warming. The farmer, who seemed to wish to be always disputing with that excellent female, said this was worse for him than the salt was—and my compliant friend had still strength enough to agree with the husband in a very weak voice that it was. But I can with difficulty respect a man who agrees with everybody.

Nevertheless, these adaptations of veterinary practice seemed to have aroused the stricken man, for while we were all still pondering if there were not some other beneficial thing we might do for poor Johan, and had almost struck upon a plan of rather heroic treatment, the patient who had been listening with keen interest suddenly arose and tottered with deep groans to the gate, where he showed an unnatural desire to at once part from his kindly benefactors and continue his journey into the cold night alone—which was, I think, ingratitude.

Having now wheeled nearly all night by the light of the full moon, we stood together an hour later on the summit of a great sloping hill at early dawn, and by the soft pink glow of the rising sun saw through the rolling mists of palest purple the silvery gleam of the Georgian Bay waters miles away. As we approached the port I reasoned with myself as to whether I should unfold to Johan the journey I had laid down for myself, and invite him to join me. Usually I prefer to be alone, and there is always a great risk in choosing a companion, especially in such a learned tour as I was contemplating, which, besides being medical and scientific in its object, was over very historical ground indeed, and a grave enterprise therefore, to be taken in hand seriously, and with a mind calmly poised. I thought I would ascertain tentatively whether his tastes were historical or not. I knew, of course, that they were already medical, for he said that he could still taste the

horse liniment. My opportunity came as we reached the beautiful steamer *Majestic*.

"We part here," he said. It was evident he had followed me down to the wharf to see me off.

"No," I answered in a bluff, hearty voice, "not yet, my friend. I have been thinking it over, and I would really be charmed to have you come with me."

"But I cannot," he said, making as if to go aboard, "for you see I have bought my ticket."

"Not on that boat!" I cried with some irritation. "It is I who am going on that boat. That is my boat." And I looked sideways towards a little mud-barge, as if for him to go on it.

Not knowing my previous thoughts, of course, he only laughed at this, and had given both our wheels to the porter before I could say anything more.

"At all events," I thought to myself, as I grasped the odd coincidence, "I wanted the fellow to come with me, anyway." So I thought I would find out if he was historical, and with a view to further discussing the places about to be visited, which played so important a part in the days of the French *régime* asked him casually if he had paid much attention to the "Relations of the Jesuits." He said that he believed the Jesuits had aunts and uncles like other people, but that his acquaintance among the kindred of the Order was very limited. This was a dampener.

Furthermore, it began to rain as soon as we cleared port, and we withdrew to our stateroom. He sat on the lower berth, and I sat opposite upon a little stool with a pipe. As we couldn't see anything outside for the storm, I talked to him until tea-time about a convention of undertakers and embalmers I once went to on a pass, and he found my narrative so amusing that he would repeatedly throw his head back and hit the edge of the upper berth with the bald portion of his parietals. Johan was very bald. Being mindful to always have my thoughts bent upon scientific inquiry, I made my account after he had done this for the third time even more funny than it really was (for the embalmers had not had a particularly cheerful time together), so that I would be able to see how many times my friend would forget about the berth and hit his head again. Statistics would, I think, be of interest, but the course of scientific observation was unfortunately disturbed, for at the first sound of the gong the passengers poured with alacrity to the tables, and it struck me that this famine alertness might be a preliminary to the period of expansive rejuvenation as prefigured in the enticing advertisements of the steamboat line.

Opposite me glowered a very robust personage who had an enormous brilliant red beard of the variety which polite school-boys in their familiar moments designate as "fire-escapes." A glance at him was like a strong condiment. The meal was what is known as a "fish-dinner," and consisted largely of white-fish,

that exquisite delicacy of fresh northern waters. I would like to say as much about this admirable fish as a certain Roman emperor said once about a favorite fish of his own. Indeed, after this fish, I am told, the steamboat line has been very appropriately named, "The White Line."* Certainly, after having been once initiated into its excellencies, I mean both of the steamboat and the fish, one is in no way to forget it. The Atlantic has its cod, and the Pacific its salmon, but here was a fish of the lonely depths and foaming cataracts with a wild piquancy and a romance unsullied by any mental picture of cod liver oil, or the canned products of Astoria. We were soon to see the dusky fishers themselves.

I found considerable entertainment during the meal in observing a Michigan widower in rather gay mourning, who was speaking to an eligible female with that soft bewitching manner which characterizes some commercial gentlemen when buying and selling goods. He was explaining to her the peculiar uses of a patent finger-nail-parer. I noticed that his nails were nearly gone through repeated demonstrations of its utility upon them. It was his pleasant way of opening an acquaintance or ending a conversation. It was of nickel, and, as he remarked, "small of compass, and with care would last a lifetime." It combined all the uses of the toilet-table armamentarium at a very low cost. He, however, could get another one, I heard him say (through a friend), for thirty cents. The regular price of this invaluable pocket companion would seem to have been thirty-five.

After a promenade on the hurricane deck, where the lake air stimulated one like a glass—two glasses—of sherry, I returned to the saloon, where the more stupid of the passengers were already reading the inevitable Scotch novels with their ministerial heroes; and not much cheered with the sight I retired to our stateroom to find that I had been forestalled by my prudent companion, who had thoughtfully pre-empted the lower berth. For a moment I could have pounded his unconscious head, as it shone through a rift in the curtains like a pale moon through a crimson cloud. It always grieves me to see one too thoughtful of self. I overcame the savage impulse, however, and presently fell asleep in the berth above him though it was still very early in the evening, and slumbered with the soundness of a primitive cave-dweller, with vague visions of the Sacred Islands, lying far away through the dark and storm upon the bosom of the lonely waters.

I had longed for years to see their mysterious coasts, haunted even to our day with the mythical spirit of Algonquin legend. I was awakened very early by the clear warm glow of the morning, and looking out saw the placid waters burnished like silver, with a deep border of crimson upon the eastern sky verge. The sun was up. Far in the distance there was a delicate blue line, broken in places, which I felt must be the enchanted isles. Perhaps the

* The Georgian Bay and Lake Superior Steamship Line of Collingwood.

spell of beauty may have all been in my eye. At all events, it is a great luxury to sleep like a cave-dweller.

We were approaching Grand Manitoulin Island, which was long ago supposed to be the seat of the deity of the Algonquin tribes. Manitou, the *genius loci*, remains only as a name, yet an air of intense loneliness hangs over the sombre hills. The bold banks are luxuriantly clothed with beautiful verdure, but for miles I saw no sign of life. Sweeping northward, we entered a maze of islets which swim like a thick host of smaller satellites about this mighty isle. Through cold blue straits, hewn sharply in the hard red rock, with the plumy green foliage spreading out in the shining air above, the white steamer majestically glided, at times so near the steep shores that outstretching branches almost brushed our decks. The dimpling waters, as soon as we were in the archipelago, were peopled with Indian craft. From Indian beach-fires the white smoke slowly coiled as we floated on from isle to isle; and the brown wigwams could be seen through the trees with the laughing children playing naked in the sunlight with the dogs of the camp. Sometimes we stopped and did trade with them as they came out to us in their fleets—traded with them, I fancy, in just the same old way that Cartier's sailors trafficked by the rocks of Stadacona, or the Argonauts with the peddlers of Cholchis. Copper, our Indian girls had, and purple amethysts, and quaint forest volumes, bound with sweet marsh hay, with the golden and silver pages of birchen bark richly illuminated with the brilliantly dyed quills of the porcupine. An aromatic odor clung to everything—a soft persistent perfume that brought back all the wild romance of the forest, and the power and peril and beauty and innocence of nature still untarnished. In such a book should the epic of that lost race be written.

As the shadows of evening deepened among the islands, group after group of the passengers retired to the saloon, and I was left all alone upon the upper deck watching the dim shores, and here and there the deep red glare of an Indian camp-fire. There was a delicate exhilaration in the balmy air, which, loaded with the soft terebinthinate perfumes from the ancient forests, seemed to suggest frankincense and myrrh. The red and green lights of the vessel were tremblingly reflected upon the calm black water, and soon the moon rose in splendor over all and swam gently out among the stars with all her golden sails spread. I state this as a fact of singular scientific interest. It was at this time that I became conscious of vigorous ululations from beneath, and the tin-pan accompaniment of the steamer's piano. The passengers were all singing hymns! It was Sunday, and I had completely forgotten it for one whole charming day.

We were at the time opposite a great promontory which seemed to wall in all the north. On the hidden shore beneath were many twinkling lights, and presently I perceived a deep cleft and a sweeping valley, and along the banks a populous town. This

beautiful haven was called Gore Bay. The thunderous bray of the steamer's whistle put a stop to all the vocal exercises in the cabin, and as we neared the wharves the passengers all poured out upon the deck. Crowds of people were moving upon the landing. Carriages and busses were to be seen a little farther back, and above all I could hear the discordant noises of civilization. It was unmistakable, and in a moment illusion was completely gone. Descending from my place upon the upper deck, I made up my mind resignedly to make the most of the world, the flesh and the devil. I was very soon to come in contact with one of these three, I won't say which, personified in the form of Beauty.

A large number of fresh passengers were coming on board, and with a satchel and parasol in one hand and a dainty travelling cloak in the other, I saw a young girl coming up the brass companionway. In a moment I recognized her with the utmost pleasure. It was Cynthia, who with softly beaming eyes dropped her *impedimenta* at the sight of a familiar face, and tripped forward to meet me, followed by her cousin Farina. Cynthia had been tanned to a soft honey brown since I had seen her last in the hospital, and was covered with that dainty bloom of girlhood which suggests rose gardens rather than drawing-rooms. It seemed odd, too, to see Cynthia without her uniform. Lovely and quaint in her kerchief and apron, and the Red Cross brooch at her neck, like a diviner Britomart, she was just as lovely as a civilian. I imagine Cynthia was a typical summer girl. She had been spending a few weeks with Farina in her remote island home. Relations of camaraderie were established at once by an imperious request from Cynthia to find her ticket, which she had casually discovered at this moment to be lost. It flashed through my mind to go and ask Farina, but she didn't look as if she knew. Then I thought of going out with a few matches and looking carefully over the pier. It might, I thought, have dropped between the planks and be even now harmlessly sticking there. I was prevented from going ashore in quest of it by the drawing in of the gang-plank, and further anxiety was removed by the discovery of the ticket soon afterward where she had placed it for specially safe keeping.

It was a little later that my travelling companion, who had been making overtures to the coy Farina, established her, not without some resistance, at the piano already referred to, from which "bad eminence" she proceeded to discourse popular airs. Withdrawn at some distance I became presently conscious of a portentous lull about that instrument, and it gradually dawned upon me that we were about to be favored with a solo from some one who still kept modestly in the background. My suspicions, which were based upon certain preliminary manœuvres upon the piano which one usually associates with an impending vocal attempt by someone, had too soon their realization, for the next moment my friend Johan was at her side. I admonished Cynthia

to be calm, and we both waited in painful expectation. Johan inflated his breast ostentatiously for the better development of the "chest notes," I should suppose, and glanced about him, bold in his folly and void of fear. Then, without further dramatic preamble, he burst distressingly forth into sacred song. The effort was not exhilarating. At last, feeling this himself, he retired somewhat crest-fallen, and employed the rest of the evening in a discussion of educational matters with Farina, who, it seems, had taught a rural school.

The next day we reached Sault Ste. Marie. The apples were very expensive there, and were sold by the ounce. The shop people would not willingly consent to sell half an apple. Indeed, I know of no place on the continent where one could more profitably have a store, for the prices of things are so high there that one would soon get very rich. Our vessel remained in that port until the next morning, and, with the whole evening before us, we had to make up our minds how we were going to spend it. Farina, who was startled by the terrible expense of everything (even of imitation onyx penholders), suggested that we should all four go to a prayer-meeting. At the Sault they are very reasonable in their prayer-meetings, which are, as they should be, in the reach of all, and we thought that this would be within our means. It appears, however, that my friend had been making independent inquiries upon his own account, and he elected instead to run the rapids. In large bateaux, divers Canadian voyageurs were running what is called the Rapids for a nominal fee, carrying such passengers as they could get while the steamers were in port. After the raft-slides of the Chaudiére Falls, the scene of much youthful disobedience and the joys of truancy, it appeared to me a rather tame business to flounder down these eddies, equally free from any danger of drowning, or, more exciting still, the perils of a parent's just anger. Cynthia is prone to sea-sickness, moreover, and so we left Johan and Farina to run the rapids together.

In the small hours I remember being awakened by a "presence" in our stateroom. Lying at the dock as we were, and the window being open, I was somewhat uneasy. I cautiously looked through the curtains again, and saw that someone in the faint light was standing upright in the middle of the room, so I said to myself, "If I startle him it will startle my sleeping friend beneath me also, and he will dash out of his berth in his impulsive way, and then when the two come to blows (as I hope they won't) I may be able to benefit my intrepid companion in the midst of the melée by some sudden thrust at his adversary from my place of vantage up here." I accordingly brought my foot down with a sounding thwack between the shoulders of the pensive intruder, which sent him with a bounce into the water pitcher. He turned upon me in fury. I had not expected this, and to my consternation the sleeping youth beneath me did not angrily dart out from his berth and close with the stranger as he ought to have done. Could it be possible that

he was of a timid disposition! I had not calculated upon that, and with some uneasiness saw that I was in for it single-handed. I also noticed at this time that my adversary held a shadowy something desperately in front of him as one does a weapon. There was no report, and it began to look as if he preferred to stab. Slowly pulling aside my curtain he scowled at me for a moment and said, "What did you do that for?" It was not a dagger at all, but a five dollar bill. Johan had been dreaming uneasily about it, and had got up to see if it were all right. "I have a right, I think, to look after my property," he grumbled, and taking his filthy lucre to bed with him, the matter was dropped.

The beautiful island of Mackinac is a favorite summer resort of the Western States, and there we ended our outward journey. The hack-driving industry greatly flourishes there. The island is a small one, and a drive around it is very pleasant, I have no doubt. It is altogether to the interest of the legion of cabmen, however, to make the prospect of such a drive almost irresistible, which is necessary, in view of the exorbitant fees in vogue. For this purpose History and Legend have been called into play. At remote parts of the island, the drivers darkly hint, are sights of surpassing grandeur and of intense historical interest. There are, for example, different kinds of rock—arch rock, skull rock, maiden's rock, and the like, which no one should miss seeing. There is also a skull cave, a devil's kitchen, a wishing spring, and a lover's leap. The hack-drivers, before a bargain is struck, only give one the names of these wonderful objects, but they solemnly promise that on the road they will tell you many very interesting things about them. This, however, they will not do for nothing.

While quite alive to the fact that in the foregoing the numerous details into which I have patiently entered, are of vital interest to the professional reader in search of accurate information upon a purely medical subject; and while I have a will to laudably continue for a considerable time longer in the same deeply scientific strain, it behooves me to remember the axiom of Holofernes, *vir sapit qui pauca loquitur.*

So this, in conclusion of the whole matter, was my sail through the Sacred Islands. I sometimes think of those halcyon days even now, and of the tragical partings at the end of that thrice happy voyage. In sordid moments I murmur sometimes, too, against my present commissariat, and cite the famous "fish-dinners" on the *Majestic*, but they say that it was not so much the freshness of the fish as of the air, and mock at me, and bid me with many other unbelieving jibes to go back to the far-away islands of the north and mend my temper and my appetite. This is the fate of all discoverers and explorers. And in revenge perhaps I shall. Yes, perhaps I shall—but Cynthia will not be there! She has gone very far away.

Soberly, however, and without further metaphor, the constant change of scene in a quiet water journey of this kind, while not

sufficient to unduly excite, is quite enough to draw away from self the thoughts of the invalid, and I would strongly recommend such a journey as preferable in some cases to a stay of equal length at the best managed sanitarium in the world. The enforced idleness of a sanitarium is not always the wisest treatment for neurasthenia; and in many cases, especially where mental depression is a marked symptom, the life at such a place frequently directs the patient's thoughts to himself, and furnishes not the best food for a fancy too inclined to brood darkly upon trivial personal matters. The morbid should be removed from all associations of a similar nature, and if possible cast loose in the free, strong current of wholesome humanity, blooming with health, and free from all taint of disease. I have often thought that in such instances *similia similibus non curantur*. And it was these ideas, rather than the pleasure in the voyage which the mere tourist experiences, that first led me to think of setting down what I have upon the subject; and if a certain blitheness of feeling, which the reminiscences of such a journey may have engendered, has led to an occasional lightness in treatment, I sincerely trust that this will in no way cloud the more important facts which I have brought forward for serious consideration.

From the tourist's standpoint, Mackinac Island and Thunder Bay have been exploited by other hands; and it is rather in the interest of the convalescent, therefore, and the neurasthenic that I have been drawn to speak, though not for a moment pretending to have been the first to have been impressed with the idea, when it is in this same charmed region of the north that a sanitarium for consumptives has been very recently erected.

A CASE OF ABNORMALLY HIGH TEMPERATURE SUBSEQUENT TO ATTACK OF TERTIAN AGUE.

BY S. GRAINGER, M.D.

M. P., age thirty-nine, married woman, family of six children, oldest one being seventeen years of age.

Present condition—When summoned first late one evening, she was found suffering from a severe chill, accompanied by chattering of the teeth, becoming almost uncontrollable. In spite of the fact that she was covered up with two eiderdown bed-quilts, in addition to the regular bed-clothing, she still continued cold. I found her pulse at that time 102 to the minute, quite soft and flabby, and considerably interrupted in action. Her temperature was 104 1-5. She had terrific headache with a good deal of local pain over the neighborhood of the spleen. Her skin was decidedly jaundiced, as well as moist. After administering temporary relief, I was told that Mrs. P. had not been feeling well for over two weeks, that she would get up in the morning feeling just as tired as when she

went to bed, and that the least housework she would attempt to do would be a perfect piece of drudgery to her, and that she would have to lie down every forenoon for an hour to rest. She had had a great many headaches recently, coming on about five p.m., and lasting till bedtime, and also frequent attacks of nausea. On being asked about the yellowness in the skin, she said that she had not had that for seven years, since she left the South, where she originally came from. She reported to me that where she spent some years there was very low and swampy land, and that there was a good deal of malarial fever there in the spring and fall of the year.

She said she had eight or nine years before had several attacks of fever and ague coming on every second day, sometimes every third; but that since coming north she had been quite free from the seizures.

Family history was good. Her father and mother are both living and well. Children all living but one, who died of Bright's disease, as a sequela to scarlet fever at eleven years of age. There is no history of phthisis, or any other hereditary condition whatever.

Each attack used to be followed by profuse sweating and excessive weakness for hours. As the case was evidently one of tertian malarial fever, I ordered her to have administered a bottle of medicine containing quinine sulph., grs. v. to the dose, rubbed up in fluid extract of licorice to cover the taste, every hour till the attack subsided; being prepared to double or treble the dose if required, as the patient said, "Now, Doctor, there is no earthly use of you trying to poison me with quinine, as I have taken ounces of it and it is no good." I did not, however, follow that advice, but gave the nurse implicit directions to take the temperature frequently and watch the febrifuge effect of the quinine. I returned next morning, hoping to find the temperature considerably lowered, and my patient a good deal more comfortable, having decided meanwhile to continue the quinine in full doses and at frequent intervals, so as, if possible, to abort the next chill on the second day afterwards. To my surprise, however, my patient was feeling very miserable, and the temperature but slightly lowered, the chill itself being, however, over. The pulse was still rapid and the headache just as bad. Mrs. P. had vomited also three or four times, and could not retain at all even the milk and lime-water which I ordered her as nourishment. I determined to keep up the quinine, but to give it less frequently, though in more heroic doses. I, therefore, had cachets, containing ten grains each, put up, and ordered one to be administered every four hours till my return in the evening. I also stopped the milk and lime-water, and administered half milk and half barley-water, with instructions to the nurse to give a cool alcohol bath every six hours. I also administered triturates of calomel, one-eighth grain to the dose, every two and one-half hours, till one grain had been taken, to be followed by a seidlitz powder. This latter was followed by a profuse bilious

stool. At eight p.m. she was a little easier, and complained of all manner of sounds in her ears, with a sensation as if the room were turning round. She assured me with all manner of mild invectives that if I still even thought of giving her quinine not to do so, as it never did her any good. As soon as I noticed that the awful quinine, which I dared to order in spite of her terrible warnings, had produced the physiological effect it had on the hearing, I was sure that the temperature had considerably deliquesced, and that everything would progress nicely from that on. What was my surprise, however, when I took up the nurse's report to find my patient's temperature still nearly as high as it had been when she was in the throes of the first chill, and that in spite of the fact that she had taken nearly one drachm of quinine since morning. I began to think then that my patient was right when she assured me that the quinine, at least in this case, was no good. I then, finding that there was a good deal of depression present, and shuddering when I thought of the fact that in all probability she would have another chill the next day (forty-eight hours after the first) decided to make a change, and ordered cachets containing salol, eight grains, and phenacetin, four grains, one to be taken every three hours. Next day there was a good deal less depression, and the pulse steadied, becoming fuller and slower. The temperature was lowered to 102 1-5. The only objection I found to the phenacetin was the severe perspiration following each cachet, though there was certainly less nausea. Fortunately, that evening, though there was a distinct chill, it did not amount to very much, and passed away after causing a good sweat. By this time the headache had abated, and there was no further vomiting of the milk and barley, though I added champagne to her diet occasionally. For the following three or four days progress seemed to be going on nicely, with one exception, and that was that for some reason the temperature insisted upon hovering round 102 in the evening and 100 3-5 in the morning. The chills on the fourth, sixth and eighth days were about the same in severity as that on the second day, the temperature at each time rising considerably but soon falling back to about 101 4-5 or 102, but never lower. I examined the urine for albumen, but found nothing abnormal except a large deposit of uric acid. As a little cough had been complained of I went over the chest carefully, back and front, but found nothing to account for the fever. The pulse at the end of the week had come down to eighty-eight, and had lost its intermittency, but, do my best, the thermometer would show, both in axilla and mouth, the same discouraging results. I used both a Hicks' and Barry twin thermometer and got no difference. I stopped the phenacetin and salol and used lactophenin for some days, but found that, whether due to its use or not, the jaundice returned. I ordered acetanilid, but in this case also found such a diminished secretion of urine that I had to stop that also. Having read an article in some foreign medical journal on the antipyretic action of kryofine, I ordered that preparation in seven and one-half grain

tablets every four hours, at the same time increasing the alcohol sponging to every two hours. The following day, thirteen days from the original chill, the temperature had deigned to crawl down two-fifths of a degree. So far, so good. The urine again became normal and the skin resumed its regular color. That night the temperature had not risen, as it had before, to 102 or in that neighborhood, but was the same as in the morning. Next day the temperature had sunk down to 100 2-5, and the patient felt better in many ways, having had a good night's rest. By this time the chills (tertian) had almost disappeared entirely, and she began to complain of wanting something else than "slops" as her food. I kept up the kryofine every four hours regularly, six tablets every twenty-four hours, and was most encouraged in the results. The temperature continued to defervesce, and the pulse to become slow and steady. As soon as the thermometer showed ninety-nine I ventured to order a little chicken, the breast finely teased, for her, which was very much relished. The champagne was increased in quantity, and the alcohol sponging decreased to twice daily. Sleep for six hours at a time became common, and gradually returning physical strength from day to day. In ten days more my patient had entirely recovered. The question may well be asked, What was the cause of the persistently high temperature in spite of the fact of the chills disappearing almost entirely? The cause was not to be found in the kidneys, and not in the chest. There was a distinct splenic enlargement, with a little local tenderness in that region, but nothing more. I would like to hear from any readers of the JOURNAL as to a similar case.

THE TREATMENT OF GOITRE.*

BY CHARLES R. DICKSON, M.D., TORONTO,

Electro-Therapist to Toronto General Hospital, Hospital for Sick Children, St. John's Hospital, St. Michael's Hospital, President of the American Electro-Therapeutic Association.

THE chief worth of many papers presented at meetings such as the present consists in the discussion to which they give rise. My object in reading this paper is to elicit from my confreres their views upon the relative value of the different methods of dealing with the various forms of goitre.

We have yet much to learn with regard to the thyroid gland and the treatment of the abnormal conditions in which we find it, but much progress has been made in recent years in this direction.

In females the thyroid gland is frequently found in an engorged condition before the establishment of menstruation, or before the birth of a child; these conditions may disappear without treatment,

* Read at the Canadian Medical Association meeting, Quebec, August, 1898.

hence if there is no urgent necessity to interfere we may leave to nature the restoration to the normal condition. But it often happens that instead of recession, we find that the condition is aggravated at each menstrual period, or pregnancy, and our aid is invoked. A mild form of counter irritation is occasionally sufficient, and the inunction of iodine is advocated, or the internal administration of calcium sulphide, or the extract of thyroid, or thymus gland. A mild galvanic current passed through the gland is often advantageous.

But the stage of engorgement may be carried further, and as a consequence other changes may be met with, such as fibrous, cystic, calcareous, or malignant. We also find a general disease, of which the enlargement of the thyroid is only one symptom—exophthalmic goitre. In this as in the other forms of goitre, we find that the urgency of the symptoms is not dependent upon the extent of the enlargement. The excitability and rapidity of the heart's action and the dyspnœa are the symptoms to which our attention is chiefly directed, but remedies which are usually efficacious in such conditions are not always to be relied upon here. Rest in the recumbent posture, with a diet restricted as far as possible to milk, with an occasional calomel purge, is one of the favorite recent methods of dealing with this condition; anæmia and amenorrhœa, if present, must be combated; belladonna, strychnia, arsenic and iron are the choice of some, also the administration of the animal extracts already alluded to. Galvanism of the sympathetic is a measure of the greatest value also.

When there are parenchymatous changes, the treatment laid down in dealing with the engorged conditions is applicable; the electrical current in these cases may be used in greater strength.

In the fibrous variety more vigorous treatment is demanded; we may first try the former plan, and failing in this, when no diminution in size is noticed after a reasonable time, electro-puncture may be resorted to, the needle being so prepared that the surface in contact with the skin and subcutaneous tissue is not capable of conveying the electrical current to these parts. The needle is connected with the negative side of a galvanic battery, and the electrical circuit is completed by means of a well moistened sponge or felt covered metal plate connected with the positive side of the battery and placed upon the shoulder. A current strong enough to cause the electrolytic destruction of gland tissue is employed, and if suppuration occurs, free drainage is established.

In cystic goitres, particularly of the thin-walled varieties, electricity heads the list of remedies. The contents of the cyst are first evacuated through an insulated canula; the cyst is then filled to distension with a saline solution through the same canula which is now connected with the negative side of the galvanic battery; the canula and solution thus form an electrode filling the whole cavity; the electrical circuit is established by means of a positive electrode as before, and a current of sufficient strength to destroy the lining

membrane is employed; the contents are again evacuated, and firm pressure maintained, the object being to set up adhesive inflammation of the cyst walls and so obliterate the sac.

Calcification is a condition sometimes met with, particularly if drainage has been prolonged after puncture. In such cases the injection into the cavity of a very weak solution of hydrochloric acid daily may soften the calcified material and assist its removal.

Surgical removal, I consider, should be restricted to the malignant forms, or those fibrous forms which are not amenable to other treatment.

The injection of iodine or other irritating fluids is an unwise procedure. My experience with thyroid and thymus extracts has not been very brilliant.

The whole subject of goitre is one in which I am deeply interested, and, thanks to my colleagues in Toronto, I have been enabled to devote much attention to the subject in recent years; therefore I am particularly anxious to learn what has been the experience of others in this direction.

296 Sherbourne Street, Toronto.

REPORT OF A CASE OF STRANGULATED UMBILICAL HERNIA.*

BY W. J. GIBSON, M.D., BELLEVILLE.

MR. CHAIRMAN,—In presenting the following case to your notice I have nothing new to offer, but desire solely to elicit some discussion as to the best means to be adopted in a class of cases that are always formidable, and when strangulated, frequently disastrous.

Mrs. E., aged forty-seven, farmer's wife, weight nearly 300 lbs., family of seven children, youngest three years old. During childbirth seventeen years ago, a rupture occurred at the umbilicus. The hernial protrusion was small at first, but gradually increased in size and the usual history of such cases followed, the attendance of a physician being from time to time required to relieve the patient. At no time from its inception had the hernia been entirely reduced.

On June the 9th last Dr. Mather, of Tweed, was summoned and found the patient suffering intense pain and vomiting incessantly, the bowel evidently strangulated.

A hypodermic of morphia was administered and hot fomentations applied. In a short time he was enabled to return the bowel. After an interval of ten days he was again called in, the condition being the same as on June the 9th, only the symptoms more

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*Read at the Canadian Medical Association Meeting, Quebec, August, 1898.

intensified. Stercoraceous vomiting had ensued. At this stage, Dr. Hudson, of Roslin, was called in consultation, but all efforts for relief proved futile, and it was decided that an operation afforded the only chance of saving the patient's life.

Dr. Mather telephoned to me and explained the nature of the case and asked me to come out prepared to operate. I requested the Dr. to see that plenty of water, towels and sheets were sterilized and a room got in readiness.

Having collected the necessary material for operation, I asked Dr. Yeomans, of Belleville, to accompany me, and after a three hours' drive in a broiling sun and over dusty roads, we arrived at our destination.

On examining the patient I found a tumor as large as could be grasped with two hands. The bowel was readily discovered in the centre of the mass, and as it had been strangulated for forty hours, no further attempt at reduction by manipulation was made. The patient's general condition was fair, temperature one hundred and a half, pulse ninety, stercoraceous vomiting still continuing. Immediate operation was decided on, and the usual preparations for an aseptic operation was made with as great care as time and conveniences at our disposal permitted.

Dr. Mather, assisted by Dr. Hudson, administered the anæsthetic while Dr. Yeomans assisted me at the operation. After thoroughly disinfecting the field of operation, an elliptical incision was made including the umbilicus. The sac was opened and about six inches of the transverse colon was found in the centre of the mass. The bowel was a very dark port wine color but not gangrenous. With considerable difficulty, owing to the extreme distension, the ring was divided, the bowel returned, and large flat sponges introduced to retain it. The omental mass which was firmly adherent to the margins of the opening was ligated in sections and removed. Rather free oozing kept up from a section at the lower angle, and an additional ligature of kangaroo tendon was thrown around it, completely controlling the hæmorrhage. I was rather doubtful of the sterility of this ligature, as it was taken from a number that had been handled at a previous operation without subsequent sterilization.

The abdominal opening, three inches in diameter, was now closed with buried silkworm gut passed one-quarter of an inch apart, through the recti muscles and peritoneum, one inch back from the inner margins of the opening, a continuous suture of catgut whipped over all.

Silkworm sutures were again used and passed through the skin, adipose tissue, the sheath of the recti muscles, including as much of the muscle as possible, and before tying, the adipose tissue was accurately approximated by a running catgut suture so as to prevent any pocketing. The silkworm sutures were now securely tied and the margins of the skin united by a continuous catgut suture. No drainage.

A strip of iodoform gauze was laid along the line of incision for protection, and strips of adhesive plaster two inches wide were applied to reinforce the superficial sutures and to support the wound in case of vomiting. The usual dressing of sterilized gauze and absorbent was applied, and all securely fastened by a broad abdominal bandage. The patient was put to bed feeling very comfortable. Instructions were given to use two quarts of normal salt solution per rectum to allay thirst, and possibly aid in expulsion of flatus and movement of bowels, teaspoonful doses of hot water to be given every ten minutes, a hypodermic of morphia, $\frac{1}{4}$gr., to be given if much pain or restlessness, urine to be drawn off every six or eight hours.

A report by telephone on the following day from Dr. Mather informed me that the patient passed a comfortable night, no vomiting, bowels had moved freely, pulse eighty, temperature ninety-nine and a half, patient cheerful, and everything so far satisfactory.

I saw the patient again on the fourth day; removed the dressing, found everything dry, there had been scarcely any oozing. Dressing renewed, diet increased, and no further disturbance of dressing, until the tenth day when a slight rise of temperature was observed. On removing the dressing it was found there was a discharge of pus from the lower angle of the wound. Wound was thoroughly irrigated, and directions given that it be irrigated twice a day. Wound did not open more than one inch; throughout the rest of its extent union was perfect. I believed the suppuration was caused by the kangaroo tendon, about the sterility of which I had been doubtful. No further trouble followed and the sinus gradually closed. I had expected suppuration to some extent on account of the depth of fatty tissue. The result so far has been very satisfactory, though there is a strong probability that sooner or later recurrence will take place.

AN INTERESTING CASE OF DEFECTIVE SPEECH.

BY W. A. YOUNG, M.D., L.R.C.P. (LONDON, ENG.), TORONTO.

James G—, aged fourteen years, came under my notice some time ago. The moment I asked him a question I saw that it was almost a physical impossibility for him to make any reply. He was quite unable to even form the words, far less articulate to any degree. He seemed at first, to the average outsider, unable to comprehend the meaning of the question put to him, though at the same time his mental faculties were sufficiently acute. His mother told me that her boy had been in this condition "since birth," and that no matter what pains had been taken with him to teach him during the past six years, no benefit had followed. She told me that for days and months she and many others had tried their best

to teach him to pronounce the simplest words, but to no avail James had always had good health, in spite of this trouble with his speech. Neither parent could assign any cause for the fact that two of their sons had suffered in the same way, a brother of my patient having been in just as bad a condition up till twelve years of age. Two remaining brothers and three sisters always have spoken very distinctly. No relatives on either side of the family have ever suffered from a defect in the speech in any way. This boy never had any infantile disease apart from slight attacks of the ordinary exanthemata. He had never been tongue-tied. I examined most carefully his mouth. There was no malformation of either maxilla; teeth were quite regular and in good condition, not even a condition of congestion of either of the pillars of the fauces being manifest. I noticed that both tonsils had been removed. This, the mother said, had been done at the Sick Children's Hospital three years before with the object of relieving the speech defect, but the results were nil. There was no arching of the hard palate, and no prominence of the pomum Adami noticeable. I examined his larynx with the laryngoscope, but found nothing abnormal. In order to make sure, his mother had had the boy examined by an aurist to see that there was no defect in the hearing. Nothing abnormal was found there, the boy being able to hear the ticking of a watch at a considerable distance away. Examination of the chest showed nothing abnormal, the respiratory sounds being perfectly normal. I became satisfied that James was quite able to understand what was said to him, but that he had no apparent power to respond in his mother-tongue. To aid him in making people understand his meaning, he adopted a peculiar gibberish, associated with a system of signs, as his means of expression, which were entirely unintelligible to any one except his parents. The case was not one of stammering, as his mother said so many friends had insisted on calling it, but I satisfied myself that the fundamental trouble in this case was absence of the power of differentiating between sounds, and that to perform a cure, medical treatment in the ordinary way would be useless, and that the entire matter, seeing that the boy had the average degree of intelligence, would lie in a system of education conducted by some one who had the necessary patience to deal with him, and who would concentrate every effort to teach the boy, not to learn his spelling, arithmetic, and so on, in the ordinary stereotyped manner as had been forced upon him without the slightest results for several years, but to differentiate between sounds, in order first that he might know the difference between the letter s and f, or the letter v and t; and then, mastering that, to form his words accordingly. I advised his mother to give up all idea of medical treatment and to take James to a school in the city that devotes special attention to correcting speech and voice defects. I heard nothing more of the case for some time, but had the satisfaction of having both mother and boy call and see me about three months later. James was then

able to speak fairly well, though he had to do so somewhat slowly, and with few exceptions he could pronounce any word he came across in the school reader. Now, five months from the time he was first brought to me, he is able to speak through the telephone distinctly. He can question any one, even a stranger, with ease, and I think there is no doubt that inside of another few months he will have a command of speech almost equal to the average boy of his age. I think the case sufficiently interesting to report, as it is not a case of stammering, nor is the defect due to any physical malformation, nor is it caused by a condition of idiocy or of mental weakness; but on the other hand is an instance of, as I have already stated, absence of the power of differentiating between sounds. It would be interesting to be able to find out what pathological condition, if any, were present in this boy's anatomy.

NEW FORCEPS FOR INTESTINAL ANASTOMOSIS.*

BY ERNEST LAPLACE, M.D., LL.D.,
of Philadelphia.

Professor of Surgery and of Clinical Surgery in the Medico-Chirurgical College; Surgeon to the Philadelphia and St. Agnes' Hospitals.

THE necessity for rapid and accurate suturing in performing anastomosis of the intestines, as well as the simplification of the procedure, has led us to devise a forceps which presents these two special characteristics: (1) It consists of two rings introduced into the two openings to be anastomosed and acts as a support to the parts during the act of suturing. (2) The rings of the forceps

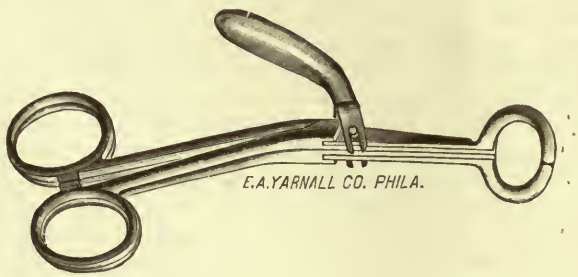

FIG. 1.

being separable into two halves can be gently withdrawn from a small aperture still unsutured, and the anastomosis is completed by adding one or two sutures.

* Read at the Meeting of the Canadian Medical Association, Quebec, Aug. 17th, 1898.

These two features offer the following advantages: (1) Rapidity and accuracy of suturing without leaving any foreign substance

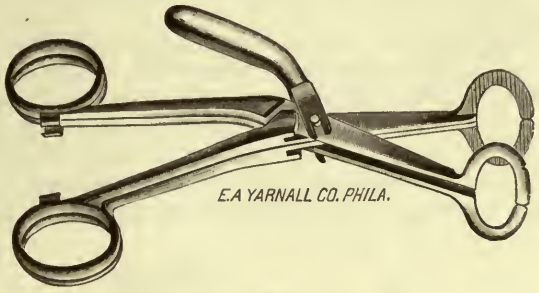

Fig. 2.

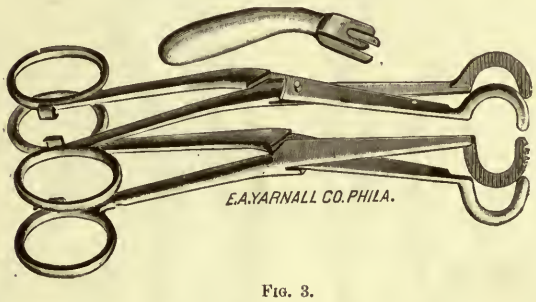

Fig. 3.

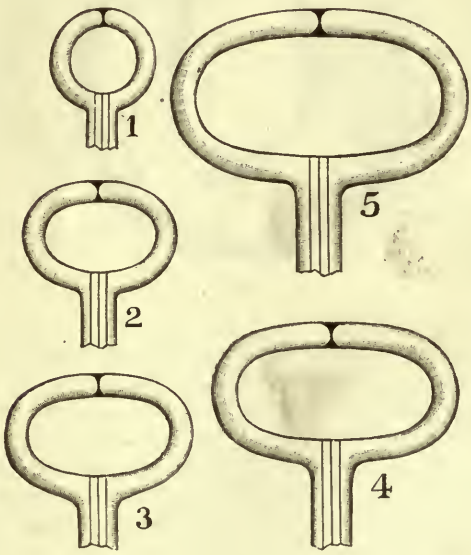

Fig. 4.

within the gut. (2) The forceps is easily adjusted to the openings. (3) There are five sizes of forceps for intestines of various calibre,

as well as for the more delicate work on the gall-bladder (cholecystenterostomy). The accompanying illustrations give a fair idea of the appearance of the instrument, as well as the various steps in the technique.

Description of the Instrument.—The instrument (Fig. 1) consists of two forceps (Fig. 2) constructed on the plan of ordinary locking hemostatic forceps (Fig. 3) brought together laterally, and held together by means of a clamp. The ends of these forceps are curved into a half-circle or half-ellipse, so that on the lateral approximation of the two forceps a ring or elliptic is formed on the end of the forceps; locking takes place at the handles, as in ordinary

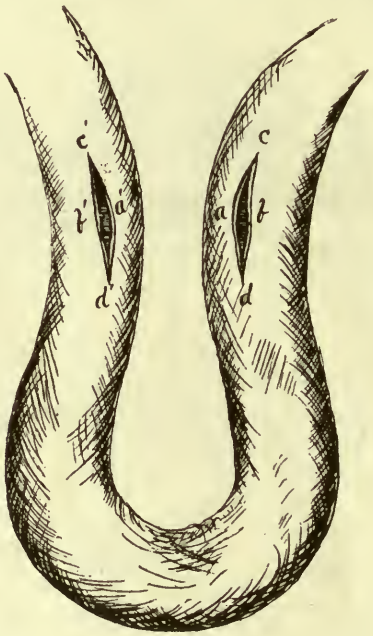

Fig. 5.

hemostatic forceps. There are five different sizes of these forceps according to the accompanying figure (Fig. 4).

Lateral Anastomosis.—A longitudinal incision is made in each intestine to be approximated (Fig. 5). At the centre of the incision, right and left, a suture is introduced, uniting the edges (Fig. 5 *a* to *a'* and *b* to *b'*) to the corresponding spot of the opposite incision (Fig. 6). A long end is left to the thread of this suture on each side. By drawing gently on these threads both incisions are transformed into diamond-shaped openings. The forceps, clamped but unlocked, is introduced by inserting one ring into each intestine, encircling each diamond-shaped opening (Fig. 7). The forceps is

then clamped, bringing serous membrane to serous membrane (Fig. 8). The sutures are applied circularly about the intestine (Fig. 9). The handles of the forceps project from the lower end of the opening. By removing the clamp the forceps falls apart in two halves. Each half is now unlocked, loosening its attachment to the gut within the intestine, and by raising one forceps at a time each half-ring is withdrawn out of the small unsutured opening (Fig. 10). The suturing is then completed.

End-to-End Anastomosis.—The two ends of the intestines (Fig. 11) are fastened together by four sutures above, below and on each side (Fig. 12). The ends of the thread are cut short. A pair

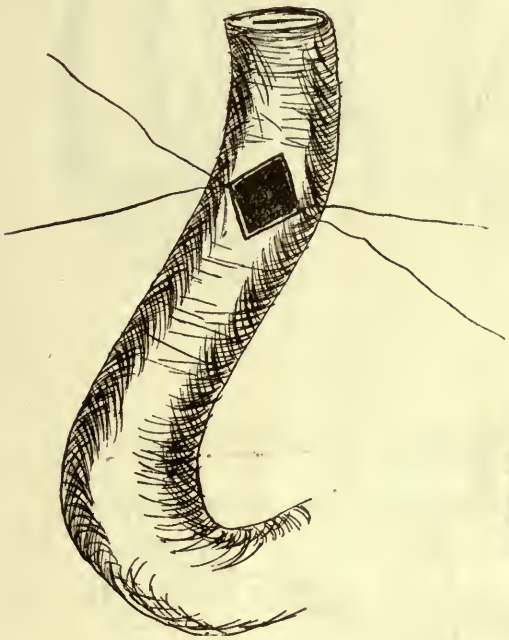

FIG. 6.

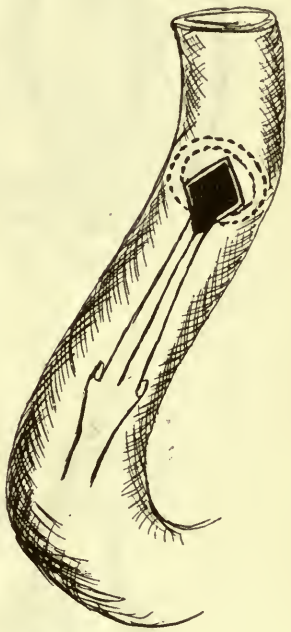

FIG. 7.

of forceps of suitable size is introduced between two of the sutures, clamped, but unlocked, so that a ring reaches beyond the end of each intestine (Fig. 13, *a*, *b*). The sutured ends, therefore, are between the two rings. In order to insure the inversion of the serous membrane before clamping, a thread is passed circularly around the sutured end of the intestines, between the blades of the forceps, and drawn moderately (Fig. 13, *c*, *d*, *e*). The forceps is then closed and locked, bringing the intestines into perfect end-to-end apposition of serous membrane. The sutures are then applied (Fig. 14). When this is completed as far as possible, the forceps is withdrawn as above. The clamp is removed. This loosens two halves of the ring; then each forceps is unlocked, loosening the

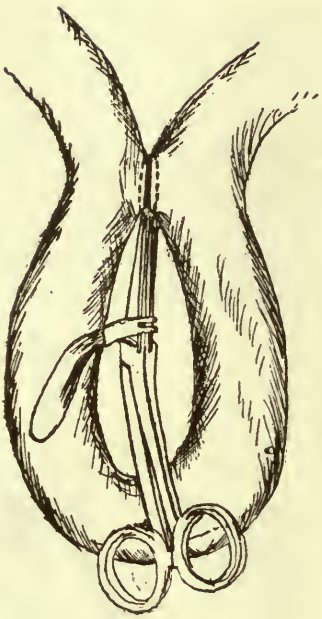

FIG. 8.

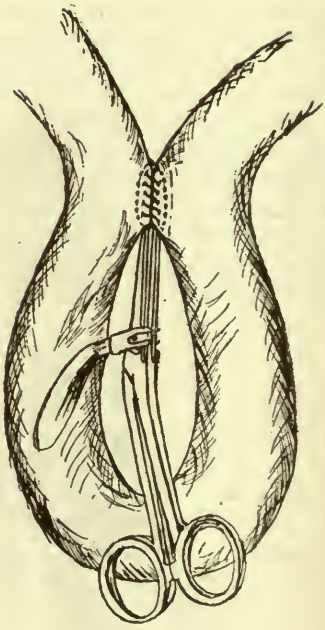

FIG. 9.

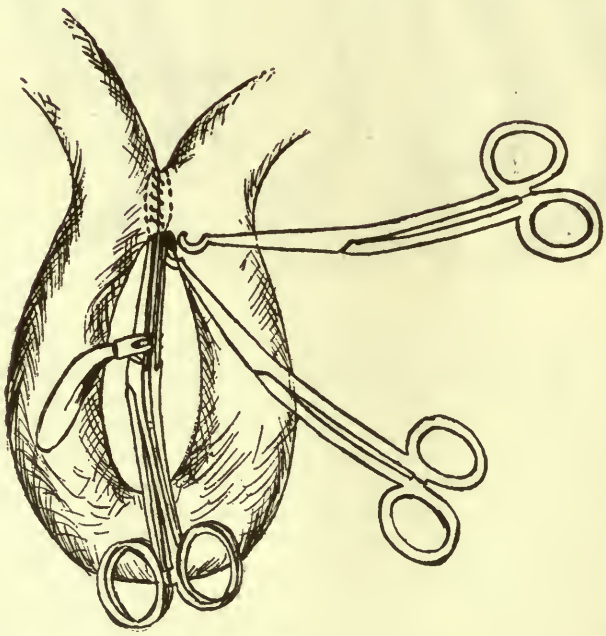

FIG. 10.

grasp of the forceps upon the intestines, and then by a semicircular motion each forceps is withdrawn. The thread which was placed

Fig. 11.

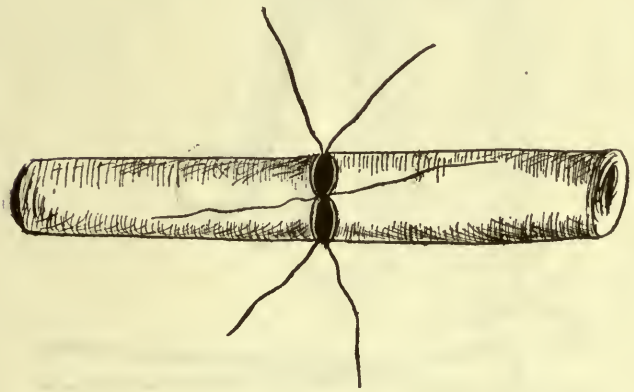

Fig. 12.

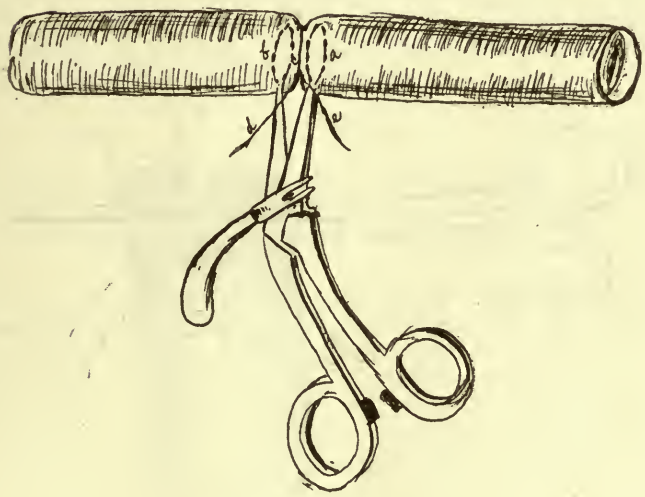

Fig. 13.

circularly between the blades of the forceps is cut and removed. The suturing is then completed.

Invagination.—For this operation we have devised a forceps whose one feature is its long slender blades (Fig. 15). The end of

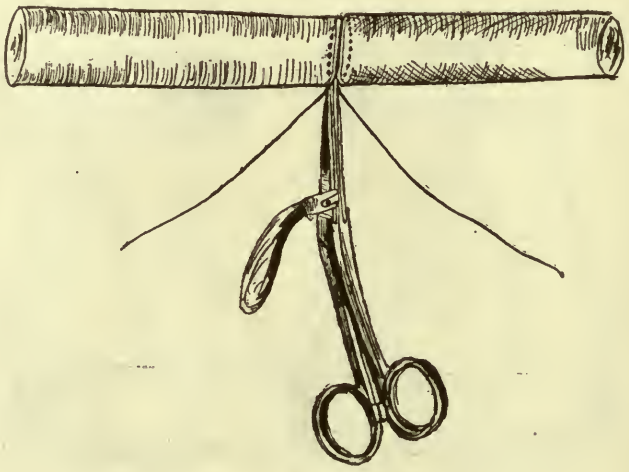

Fig. 14.

Fig. 15.

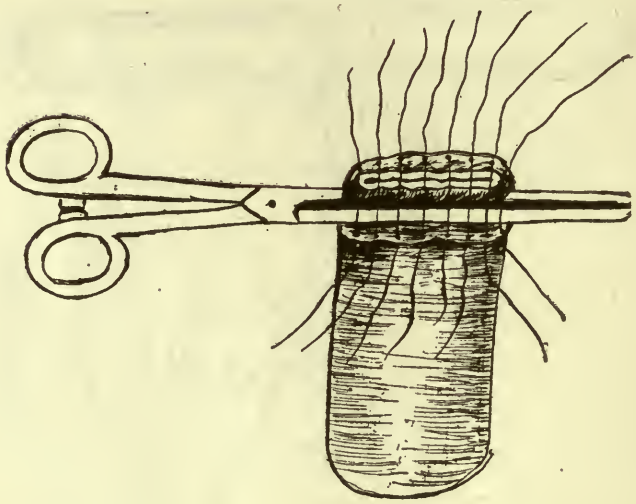

Fig. 16.

the intestine to be invaginated is clamped with this forceps and pushed downward, bringing the serous membrane on each side over

the forceps (Fig. 16). The forceps acts as a support while the sutures are applied by bringing serous membrane to serous membrane, over the forceps (Fig. 17). When the suturing is done, the forceps is unclamped and withdrawn.

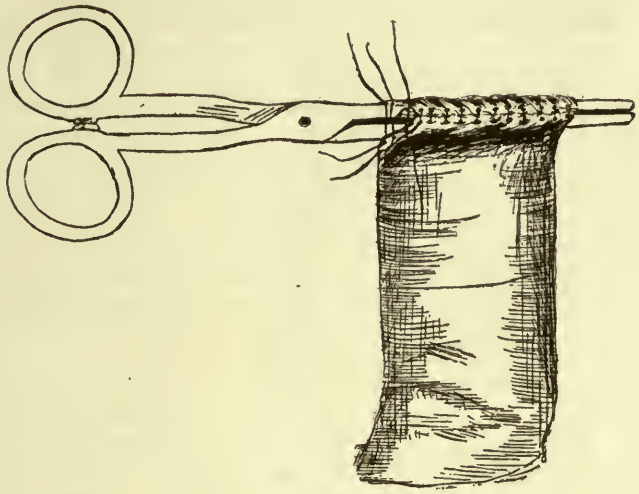

Fig. 17.

Experiments on dogs and on the cadaver have demonstrated the accuracy and rapidity of the work done by the method described.

A demonstration was given on a dog of the technique as described in this paper, at the meeting of the American Medical Association held at Denver, Col., U.S.A., June, 1898, as well as at the meeting of the Canadian Medical Association at Quebec.

THE TREATMENT OF INEBRIATES.*

BY A. M. ROSEBRUGH, M.D., TORONTO.

In this paper I desire to call attention to the treatment of pauper inebriates and to suggest an economical scheme for the treatment of the more hopeful class of these unfortunates.

In 1890-91, the writer of this paper had the honor of acting on the Prison Reform Commission appointed by the Ontario Government. One of the duties of this Commission was to make inquiry as to the cause of crime in the community, the relation of intemperance to crime, and the most approved methods of treating inebriates. In prosecuting this phase of the investigation sheriffs and prison and jail officials were examined under oath, as well as a

* Read before the Canadian Medical Association at Quebec, Aug. 19th, 1898.

number of Canadian and American gentlemen who were in a position to give their opinions as experts. Medical superintendents of lunatic asylums and gaol surgeons gave evidence also. All agreed that intemperance is a most prolific cause of crime. A number placed intemperance second to that of parental neglect as a cause of crime, while a large number testified that, in their judgment, intemperance, directly and indirectly, is the chief cause of crime. A number testified also that, at least in the case of chronic alcoholism, inebriety is a disease and should be treated accordingly. With regard to the general custom of treating inebriates as criminals by sending them to gaol, all agreed that this treatment is neither deterrent nor reformatory—that it is unphilosophical and bad economy, and by a number it was ever characterized as inhuman.

After a most careful examination of all the evidence and after submitting the proposition to a number of gentlemen qualified to give an opinion, and by whom the proposition was endorsed, the Commissioners made the following recommendations with regard to the treatment of inebriates in Ontario:

"The Commissioners recommend that the Government, out of the funds derived from the fees for provincial licenses (which might be temporarily increased for that purpose), shall erect in the centres of population one or more industrial reformatories for inebriates. Every such reformatory should be near a city, and should have attached to it a sufficient area of good land for the employment of the inmates in farming and market gardening; it should also be furnished with means for employing the inmates in suitable industrial occupations.

"That to this reformatory be committed all habitual drunkards, that is to say, all who have been previously convicted of drunkenness three times within two years; such other persons addicted to the use of strong drink as in the opinion of the county judge may be reclaimed by timely restraint and judicious treatment; and those who may be compulsorily committed to an inebriate asylum under the provisions of the Inebriate Asylum Act. The first committal to this reformatory should be for a period not shorter than six months, the second for not less than one year, and the third for two years less one day. That any inmate, whose term of imprisonment exceeds six months, may, after he has been detained for six months or more, be permitted to return home on parole if he has given satisfactory evidence of a sincere desire to live soberly and of strength of mind sufficient to enable him to keep his good resolution—such license to be granted on the recommendation of the Superintendent, endorsed by the Inspector of Prisons, and approved by the Provincial Secretary, such license to be revoked if the conditions on which it is granted be not observed.

"That if the families of any inmates of a reformatory for inebriates be wholly dependent on them for support, a portion of the proceeds of the earnings of such inmates be paid to their families; also that a portion of the net earnings of the inmates, after defraying cost of maintenance, shall be set aside to form a

fund, out of which those whose general conduct has been good and who give evidence of being reformed, shall be assisted in their efforts to earn a living for a time after leaving the reformatory.

"That if after a third commitment to an Industrial Reformatory for Inebriates, a drunkard again be convicted of drunkenness, he shall then be sentenced to the Central Prison for the full period authorized by law."

These recommendations have been endorsed by the Ontario Medical Association and by a number of other influential public bodies, but the Ontario Government has declined to give them practical effect. The Ontario Government declines to take action on the following grounds: Firstly, the number of inebriates in the Province is very large and the expense for buildings and maintenance would be very great; secondly, it would be impossible to provide such a large body of men with industrial employment; and, thirdly, the temperance organizations are taking very little interest in the movement. On grounds of public policy, as well as on economic grounds, we believe the Government is making a mistake. If only 33⅓ per cent. of drunkards are reformed by reformatory treatment, and this is estimated by competent authorities as the minimum number, the expenditure would be more than justified. This attitude having been assumed, however, the question arose: Firstly, should this attitude on the part of the Government be accepted as a finality; and, secondly, cannot a less expensive scheme be devised which, although falling short of all that could be expected of an industrial reformatory, might nevertheless be the means of rescuing a large number from drunkenness and a drunkard's grave?

Under these circumstances the Prisoners' Aid Association of Canada in January last asked me to visit inebriate hospitals—to interview specialists, and if possible to formulate a practical and economical scheme for the consideration of the Government for the scientific treatment of pauper inebriates. As a preparation for executing this commission I visited eight institutions devoted to the treatment of inebriety and interviewed a number of specialists, including the following, namely: Dr. Lett, of Guelph; Dr. Crothers, of Hartford; Dr. L. D. Mason, of Brooklyn; Dr. Hutchison, of Foxboro', and Dr. Ellsworth, of Boston. I also investigated the Boston Probation System as applied to the case of drunkards, and I made careful inquiry into the comparative merits of the different systems of treatment, whether in accord or out of accord with the generally accepted tenets of legitimate medicine.

In formulating the scheme, I had in view, necessarily, the requirements of the Province of Ontario, but if the plan I have outlined for Ontario be a good one, there is no reason why it should not be adapted to the other provinces as well.

It is in brief as follows:

1. The appointment by the Provincial Government of an inspector of inebriate institutions. This inspector should be a qualified medical practitioner who has made the medical treatment of inebriety a special study.

2. The inspector should organize in the city of Toronto a hospital for the medical treatment of pauper male inebriates of the more hopeful class, and in other cities of the Province an inebriate department in the existing general hospitals, more especially for pauper male inebriates.

3. An industrial reformatory should be established on the farm colony plan for the custody of the more hopeless or incorrigible class of male drunkards, and where they should be detained on indeterminate sentences.

4. The adoption of a rational course of medical treatment in accordance with the tenets of legitimate medicine, as, for instance, that recommended by Dr. Norman Kerr or Dr. T. D. Crothers. In the interests of science and good morals proprietary remedies should not be used.

5. The adoption of the "probation system," and giving a helping hand to patients subsequent to treatment for inebriety.

6. In the case of habitual female drunkards my recommendation is that they be sent to the provincial reformatory for the full term of two years, and that this be repeated in case of relapse. In case of the more hopeful class of female drunkards I recommend a few weeks' special treatment in any of the existing "homes" or refuges for females, followed up by subsequent judicious supervision. Arrangements to this end should be made by the Government Inspector.

In Ontario there is a per capita Government grant of 30 cents a day to all hospital patients. In order to secure the co-operation of hospital trustees in the proposed plan it may be necessary to ask the Government to increase the grant to, say, 35 or 40 cents a day for inebriate patients. The hospital accommodation in some cases may be too limited to admit of the reception of these cases. In that case possibly the Provincial Government may be disposed to come to the aid of the trustees.

An essential feature of this scheme is the proposed utilization of the Massachusetts probation system in giving a helping hand to reformed inebriates subsequent to the hospital treatment. By giving the inebriate a helping hand, and more particularly by finding him remunerative employment, he is rendered a service quite as important as that of giving him medical treatment. Both are essential. The man will not seek employment or retain it when obtained for him so long as he has a craving for intoxicants, and, on the other hand, a reformed inebriate will not long remain reformed if he fail to secure remunerative employment.

In every city and large town in Ontario there is either a truancy officer or an agent of the Children's Aid Society, or both. What I would suggest is that the services of one of these officers be secured to act as probation officer. I have no doubt, in most cases, this will not be difficult.

It is to be understood, of course, that this scheme is not suggested as a substitute for, or to take the place of, a Government reformatory or farm colony for inebriates. That will still be

necessary, and it will be complemental to the proposed hospital and probation system. The latter is suggested for the treatment of the more hopeful cases, while the former will be required for the prolonged detention of the less hopeful and incorrigible class.

Among the advantages that may be claimed for the hospital and probation system are: Firstly, it may be inaugurated at any time without waiting for the erection of expensive buildings; and, secondly, maximum efficiency is secured with minimum expense.

While I advocate the utilization of existing hospitals in the treatment of inebriates, I am free to admit that in the larger cities better results might be expected from the establishment of special hospitals.

My recommendations have not, as yet, been formally presented to the Ontario Government, and I am not in a position to state what action may be taken with respect thereto. The attention of the Inspector of Hospitals, Prisons, etc., has been called to the question, and I infer from what has passed between us that he is disposed to look upon the proposals most favorably, and I may add that, at his suggestion, I am now in correspondence with hospital trustees to ascertain to what extent their co-operation can be counted upon.

As the carrying out of this hospital treatment will naturally devolve upon the house-surgeons, many of whom are recent graduates with limited experience, my proposition is that the special medical treatment of inebriate patients shall be under the direction and supervision of the Government inspector, to whom a detailed history of each case, with all relevant facts, shall be promptly forwarded on admission. This does not refer to the preliminary treatment, which, in most chronic cases, might be entrusted to the house-surgeons. By having the special treatment under the control of a central authority there will be unity of purpose, statistics can be collected, results compared and tabulated, and progress made.

As already stated, if this scheme promises to result in the successful treatment of inebriates in Ontario, it should be equally successful in each of the other provinces of the Dominion.

It is respectfully commended to the thoughtful consideration of the members of the Canadian Medical Association, and may I be allowed to suggest the propriety of appointing a committee early in the session to make a report on the whole question, if possible, before the close of the present meeting.

The question of the treatment of inebriates was introduced into the Ontario Medical Association at the annual meeting held in June last, and was referred to a committee, but unfortunately too late to admit of a report being prepared before the close of the meeting.

I may add that the scheme here outlined has the unqualified endorsation of Dr. Stephen Lett, of the "Homewood Retreat," Guelph, and Dr. T. D. Crothers, of the Walnut Lodge Hospital, Hartford, Conn. It is also approved of by hospital trustees in Ontario, so far as heard from.

Selected Articles.

THE ELEMENTS OF ELECTRICITY IN MEDICINE.

BY PHILIP MEIROWITZ, M.D.
Instructor in Nervous and Mental Diseases, N. Y. Post-Graduate School and Hospital.

(Continued from last month.)

Electro-Diagnosis. Diseases which manifest themselves by paralysis and atrophy are the proper subjects for the diagnostic use of electricity.

Very frequently, electricity will give an insight into the severity of the affection and often throw light upon the probable duration and curability of the disease, a knowledge of which can be obtained by no other means. In the case of facial paralysis, for example, the reaction of the nerve and muscles to the electric current tells one whether the affection is light, medium, or severe and incidentally whether one may expect a rapid or a slow recovery. Hence it is proper to speak of electro-prognosis as well as electro-diagnosis.

Normal reaction. To appreciate the results obtained in the examination of pathological conditions, we must know, it seems almost superfluous to say, how normal muscles and nerves respond to electrical stimulation. It is always advisable for beginners to secure some normal subject and study the effects of both galvanism and faradism upon nerve and muscle. The points at which the nerves and muscles should best be stimulated have been made the subject of careful study by Erb and others, who have accurately mapped them out.

These maps of the body with the electro-motive points are to be found in all standard anatomies and text-books on neurology. They should always be placed in front of the operator, so that he may be able to place the examining electrode upon the proper point without much hesitation or loss of time. The examination may be made, first, with the galvanic current, and secondly with the faradic current, or *vice versa.* It is important that both currents be employed, since, in early cases of nerve degeneration, galvanism may not reveal the process as well as faradism.

The procedure with the galvanic current is as follows: The rheophores or conducting cords are attached to the binding posts of the battery and to the electrodes. The indifferent or larger electrode is placed upon some indifferent spot, usually the nape of the neck or the sternum. The different or examining electrode is placed upon the nerve or muscle to be tested. Care must be taken

to saturate the electrodes with hot water and to thoroughly moisten the skin. By this means a part of the resistance which the skin offers to the current will be overcome. The resistance is still further diminished by the addition of bicarbonate of soda to the water. The best form of examining electrode is that which has the device (consisting of an elastic strip of metal which is operated by the finger) by means of which the current may be made and broken. (See Fig. 6.)

Any number of cells as fifteen, or twenty, are thrown into the circuit, and the switch is moved from "off" to "on" by means of the polar switch which plays upon two buttons, and which indicates by its direction the positive pole, the examining electrode is made the negative pole or cathode. By means of the rheostat the current is slowly increased until a minimum current is obtained that will produce a contraction when the circuit is closed by the spring on the examining electrode. The contraction is quick, lightning-like in rapidity and is called the cathodal closure contraction. It is indicated for the sake of clearness and brevity by the symbol C.C.C.

When the circuit is opened (cathodal opening—C.O.) no contraction is observed. If the polar switch be now reversed so that the examining electrode becomes the positive pole or anode and the circuit be again made or closed (anodal closure—An.C.), no contraction is obtained, and the same is true of anodal opening, or An.O.

Thus it is seen that with a weak current we get a cathodal closure contraction (C.C.C.), but neither cathodal opening, anodal closure, nor anodal opening contractions (C.O.C.; A.C.C.; A.O.C.). If the strength of the current be increased, C.C.C. (cathodal closure contraction) become stronger; but this time we will also get An.C.C. (anodal closure contraction) and An.O.C. (anodal opening contraction); C.O.C. (cathodal opening contraction) is still absent. If the strength of the current be still further increased so as to become considerable, each of the contractions thus far obtained will be more marked and C.C.C. may become tetanic (C.C.Te.). With this strength of current we also obtain C.O.C., which is the weakest of the four.

The following table after "Neobues" summarizes these results:

	Mild Current.	Medium Current.	Strong Current.
C.C.	C.	C1.	Te.
C.O.	....	....	C.
An.C.	....	C.	C1.
An.O	....	C.	C11.

It will be seen that C.C.C. is always greater than An.C.C.; this

law may be expressed by the formula C.C.C.″, An.C.C., which is typical for normal muscles and nerves.

The relative degrees of cathodal and anodal contraction are well shown in Fig. 9. This represents a curve of closure contractions in the peroneal muscles of a healthy girl. Ka = C.C.C.; An = An.C.C.

In healthy individuals, the results obtained by examining corresponding points on both sides of the body are the same. These results are, as determined by the mil-am-meter, approximately identical for all individuals. In a patient with a one-sided affection, the healthy side is always examined first; the degree of contraction obtained on the normal side is the standard with which the degree of contraction elicited on the diseased side is to be compared. When both sides—*e.g.*, both lower extremities of a patient—are affected, it is obvious that such a comparison cannot be made. In this case, other standards must be looked for. "Erb" found that the irritability of certain nerves, as the frontal, the accessorius, the ulnar and the peroneus, is about equal in health, *i.e.*, any strength of current applied to these nerves produces about the same degree of contraction in the muscles supplied by them. Thus if the peroneal

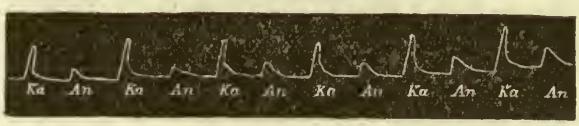

Fig. 9.—An = Anode. Ka = Kathode.

nerves in both lower extremities be affected, their irritability may be compared with the ulnar nerves and *vice versa*. In this way it may be learned, for example, to what extent C.C.C. is reduced or An.C.C. increased.

In using the faradic current, the electrodes are placed upon the body in the same way as when the galvanic current is employed. The healthy side is tested first. Before beginning, the secondary coil must be moved from over the primary coil, so as not to shock the patient who would thus get the full strength of the current. The current is slowly increased by gradually moving the secondary coil over the primary until the current is just sufficient to produce a distinct contraction when it is broken by means of the examining electrode. The affected side is now examined under the same conditions and the contraction obtained compared with that of the healthy side.

Pathological reactions. In abnormal states of the muscles and nerves, their electrical irritability is altered. There may be greater or less diminution of the cathodal: there may be greater or less increase of the anodal, or there may be entire absence of response to any form of stimulation.

Simple diminution of electrical irritability occurs in all con-

ditions of muscular atrophy in which neither muscles nor nerves have become degenerated. There is a quantitative change in the normal formula C.C.C., An.C.C., which now reads—C.C.C. = An.C.C., *i.e.*, each of the contractions is less than normal, but the C.C.C. is still greater than An.C.C.

Among the diseases which are accompanied or followed by simple muscular atrophy are pseudo-hypertrophic muscular paralysis, juvenile hereditary atrophies, hemiplegia following cerebral disease, atrophy from disuse, etc.

When the nerves and muscles have become degenerated, the change in reaction is one of *quality*. It is now found that C.C.C. is no longer greater than An.C.C.; on the contrary, An.C.C. = C.C.C. This is the so-called reaction of degeneration, expressed by the letters R.D The quality of the contraction is also altered. The normal contraction is quick, whilst in degeneration the contraction is slow and sluggish.

When the faradic current is employed in degenerative conditions the reaction may be either very weak or altogether absent, so that the strongest current will fail to produce muscular contraction.

The following table by Sachs ("The Nervous Diseases of Children") summarizes normal and pathological reaction:

Normal Electrical Conditions.		Reaction of Degeneration.	
	Nerve and Muscle.	Nerve.	Muscle.
Faradic current...	Contractions good; prompt.	No response (except in partial R.D.).	No response (except in partial R.D.).
Galvanic current..	Contractions prompt and quick	No response.	Increased excitability at first, then diminished. Contractions sluggish. With strong currents. 1. A.C.C. ⟩ A C.C. 2. K.C.C. ⟩ K.C.C. 3. A.O.C. 4. K.O.C. or A.C.C.= K.C.C.
Order of contractions	1. K.C.C. 2. A.C.C. ⟩ Interchangeable. 3. A.O.C. ⟩ 4. K.O.C. 5. K.C.Te. (rare).		

Significance of the Reaction of Degeneration. The ganglionic cells in the anterior horns of the spinal cord act as nutrient centres or reservoirs, for the nerve fibres which are given off from them are for the muscles which these fibres innervate. Any lesion which destroys the anterior ganglionic cell of the cord will cause de-

generation of the corresponding fibres and muscles. If a lesion severs the connection of a motor nerve in any part of its course, that portion of the nerve and the corresponding muscles below the site of the lesion will undergo degeneration and atrophy. Lesions having other anatomical sites do not cause degeneration. Hence, when R.D. is obtained we are absolutely positive that either the motor nerves or the anterior ganglionic cells are diseased. So long as the anterior ganglionic cells or the nerves remain intact no R.D. can be obtained.

In anterior poliomyelites, *e.g.*, the ganglionic cells in the anterior horns are destroyed. In consequence the corresponding nerves and muscles, atrophy and electrical tests show R.D.

In the severe forms of neuritis, in which the nerve fibres are destroyed, the electrical tests show also R.D.

In diseases of the brain or of the spinal cord which are accompanied by paralysis and atrophy from disuse, but which do not affect the anterior ganglionic cells of the spinal cord or the nerves given off from them, R.D. is never obtained.

In addition to its value as a diagnostic aid, electricity is also extensively employed in the treatment of a large variety of diseases. Owing to their ability to cause muscular contraction, both galvanism and faradism are used with good results in many conditions of muscular paralysis and weakness. A point of importance to which especial attention should be called is, that that kind of electricity should be employed which produces the best contraction. If, for example, in the case of a severe facial palsy the contraction of the affected muscles can only be brought about by the anodal pole of the galvanic current, it would be foolish to employ the cathode or to persist in the use of the faradic current. I have known a physician to use faradism for a long time in a case of facial paralysis when the muscles and nerve would only respond to galvanism. It is needless to say that his treatment was inefficacious.

It is impossible within the narrow limits of a short paper to indicate all the conditions in which electricity may be profitably employed as a therapeutic agent: hence, only some of the most useful application will be made.

Owing to the ability of the galvanic or constant current to decompose water into its gaseous elements (electrolysis), the galvanic current has been much employed in cases where it is desirable to get rid of abnormal tissues, such as tumors, etc. By means of properly constructed needle electrodes the current is conducted into the growth, the watery constituents of which become decomposed and the tissue disintegrated.

In skin diseases, the electrolytic action of the galvanic current has been taken advantage of in the treatment of various facial blemishes, as hypertrichosis, nævi, angiomata, etc.

In uterine affections, the treatment by electricity has been greatly advanced by Apostoli, Tripier and others. The "Kidder"

high tension coil has been found of very great value in painful conditions of the pelvis. Electrolysis always plays an important role in uterine neoplasm.

There is hardly a department of medicine in which electricity in its various forms has not been found to be of great service. The physician should consider the possession of suitable galvanic and faradic appliances as important almost as that of the thermometer and the stethoscope for diagnostic purposes, and more important frequently than all of the remedies in the pharmacopœia. There are many cases that can be treated *only* by electricity in one of its various forms, and the physician who would neglect this valuable therapeutic aid in such cases is certainly not doing the best for his patients.

A summary by "Engelmann" (*Journal of Electro-Therapeutics*, May, 1891) of the most important factors by which the properties of the electrical current are changed should be carefully studied by the beginner.

GALVANIC	FARADIC
VARIES WITH	
Intensity; number of elements.	Intensity; distance between primary and secondary coil; influenced less by electro-motor force of generating element.
Pole; negative, alkaline, fluidifying, stimulating, positive, acid, coagulating, sedative.	Pole; slight difference, negative, more irritating, painful, positive, less painful, more serviceable for deep application.
Time of use.	Time of use.
Constancy.	Number and length of interruptions, method of increase and decrease.
Size, shape and material of electrode.	Size, shape and material of electrode.
Metallic for chemical effect.	Metallic for irritation.
Moist, non-metallic for distribution and penetration.	Moist, non-metallic for penetration.
	Length and thickness of wire in secondary coil.
	High tension, effects on nerves by long secondary coil of fine wire.
	Quality and low tension, effect by short coil of heavy wire.
	Primary current more penetrating with metallic electrode.
	Secondary current more penetrating with moist non-metallic electrode.

"Engelmann" also summarizes the therapeutic effects of electricity which may serve as a sedative, stimulant, counter-irritant and vesicant, muscle contractor, antispasmodic, tonic, promoter of development, absorbent, chemical cautery, coagulator, electrolytic, hemostatic, promoter of hæmorrhage, decongester and medicator.

It is not supposed that this sketch will be considered more than the merest outline of the subject. Having mastered these ele-

mentary principles, the physician is earnestly urged to consult some standard work for a more detailed and extended exposition of electro-diagnosis and electro-therapeutics.

202 W. 131st Street, New York.

MILITARY INSTRUCTION AT NETLEY AND ALDERSHOT.

THE following notes as to the work entailed from taking a course of military instruction at Netley, England, and elsewhere, sent by Dr. W. Nattrass, of Toronto, will interest our readers who are of a military turn of mind. The Doctor, in writing home, says:

"It is nothing but work here. I am at work on the parade ground every morning at 6.30, and we keep it up (calling off for breakfast and lunch, of course) until four in the afternoon. I am not looking on, but live up with the rest of the 'Tommies,' sometimes going through the mazes of squad and company drill, or a few battalion movements. At other times I am assisting in lugging around 'the wounded' on a stretcher. It is a little trying at times, especially when the sergeant gives the command 'Lift wounded,' and then lets you stand there until he gives the detail for reaching the nearest ambulance waggon or collecting station. Then you are started off, when someone makes a blunder or false step before we get half way, when 'As you were' rings in your ears, and you feel like dropping the poles, wounded and all. At last we reach the ambulance waggon, get our patients stowed away comfortably, back-board and tail-board—for there are both—up and snugly fastened when we get the command 'Unload wounded.' It is funny to watch the perfectly mechanical way in which 'Tommy' goes about his work. It makes no difference to him whether he is doing or undoing.

"The other day we went down to 'Scroggie's Bottom' for a lesson on building kitchens. We made the Aldershot Gridiron Kitchen, which is large enough to cook for a whole battalion. The place was a sort of summer-dried marsh, hard as a rock. It had all to be picked out, but the Tommies worked away and at last got it completed, lugged some water from a neighboring well, filled their kettles, banked them round and started a fire.

"Then we all fell in and listened to a brief lecture from the Major in command. On the command 'Fall out,' 'Fill in trenches,' Tommy went at it again to fill in, apparently just as happy in the undoing as in the doing.

"One day we went out for a field day exercise with a bearer company in active service. Wounded men were strewn about the battlefield.

"We were sent out with stretchers and first aids, temporarily bound up their wounds (each man was labelled with the wound he

had received), and carried them to the collecting station, where we placed them in the ambulance waggons drawn up to receive them. Then we drove off about two miles to a dressing station, out of range of fire, where the most seriously wounded were further attended to and operations performed, after which they were reloaded in a fresh relay of ambulances, waggons plying between the dressing station and the nearest field hospital, which was supposed to be some five or six miles away. The whole thing was very instructive and realistic, especially so as a brigade of artillery had gone out an hour or two before us and had taken up a position on some rising ground about a mile or so in front of us, and were pegging away all the time we were there (this without any previous arrangement on our part). The whole thing had quite a warlike appearance."

. . . . . .

"This is an excellent course, and although I am as tired as a dog every night, I am enjoying it very much and feel I will know something about my branch of the service when I leave here. The army medical corps here is a perfectly independent unit. Its organization is as complete in itself as any other battalion. The C.O. is a Surgeon-Colonel Allen, who gives us an hour every day on administrative work, orderly room, internal economy, military law, etc. Major James takes us in waggon drill, pack animal drill, cacolet drill, pitching field hospitals and bearer company camps, their organization and administration.

"Capt. Parry takes us in stretcher drill, hand seat drill, loading and unloading wounded on improvised vehicles and into railway cars, etc., while Capt. Julian the adjutant, looks after our squad, company and battalion drill.

"There is only one other Canadian officer in the class—Surgeon-Major H. S. Birkett, of the Victoria Rifles, Montreal.

"The officers are all exceedingly kind to us—made us honorary members of their mess and gave us a dinner the first week we were there. They all seem anxious to do everything they can for us in making us comfortable and in imparting instruction.

"I expect to go for a few days to Salisbury Plain to see the manœuvres, which this year are to be on a very large scale."

. . . . . .

Writing from Aldershot, Dr. Nattrass says:

"Our course is now drawing near the end. We expect to get away next week for the Salisbury manœuvres, and then on to Netley. We will not be many days there, as we have only two or three things to look up—the X-ray as a localizer, and a combination or attachment for telling the distance of the bullet from the surface of the body; the treatment of bullet wounds in the Royal Victoria Hospital.

"I have been very much pleased and interested with the course here. There is a lot of special drill in connection with it. Not the least interesting was a practical illustration this morning of how

to handle the cavalry wounded; how to mount, dismount and carry the wounded with a disabled arm or leg, or, when not too seriously wounded, to sit on his horse alone. This appealed to me as more practical than the cacolets or chairs for mule transport of wounded.

"The officers at this depot have been exceedingly kind to us and have shown us everything they possibly could. Major James, who has had us chiefly in hand, said to-day that we had nearly exhausted all his resources. The colonel said also the other day to a lady friend of ours that 'those Canadians are too energetic, they keep us thinking what we shall give them next.'

"Neither have they neglected us in a social way. My wife being here, through the kindness of the depot, we have seen a good deal of the social side of Aldershot. The seniors have been just as friendly and kind as the juniors, which to us with a Canadian training, was a little bit surprising. The colonel's wife gave us a garden party, and Mrs. O'Dwyer, the wife of Surgeon-General O'Dwyer, P. M. O. of this district, gave us a picnic a few miles into the country.

. . . . . .

"We are off to the manœuvres in a few days. Fortunately Dr. Birkett and I are going to be supplied with a mount each. We were much amused yesterday when the colonel informed us of this. He said, 'You Canadians can get anything you want while we slave away and get kicks for half-pennies.' He said the G. O. C., His Royal Highness the Duke of Connaught, had given instructions for horses for Birkett and me, to be supplied on the grounds when we arrive, also permission to ride anywhere over the battle-ground.

"We expect this will be very interesting and instructive, as several new features in connection with the army medical service are to be put to a practical test. The work of the army surgeon and stretcher bearers is bound to vary with the improvements of modern warfare, so that old methods will have to give place to newer ones. These demonstrations we expect to find both useful and interesting.

THE ANTITOXIN PATENT—WHY REFUSED FIVE TIMES, YET FINALLY ALLOWED.

BY J. R. JOHNS, M.D., PHILADELPHIA.

An examination of the official file wrapper and contents of the United States patent granted to Behring on diphtheria antitoxin, under date of June 21st, 1898, gives us the clearest idea of the subject, which is at present attracting world-wide attention. It appears that since January 11th, 1895, Behring filed five different applications, each being presented promptly after its predecessor was refused. The first lacked very materially in clearness, but like the other four claimed for the would-be patentee the discovery

and perfecting of "a successful plan or process by which diphtheria antitoxin can be secured upon a large commercial scale." This claim is specially stated in the second application as an elucidation of the intent and purpose of the first, and is defended by argument in the last three. In the same application we find the clearest statement of what is not claimed in the following words: "This invention does not cover a method of medical treatment (which is not patentable). While innoculation to immunize is known, no one before the invention of this process has gone beyond establishing general scientific principles. I lay no claim in underlying scientific principles, as those were evolved by many."

The main argument advanced to sustain the claim is the fact that the applicant was awarded the "Alberto Levy prize" for the discovery of diphtheria antitoxin. This, it may be remarked, is offset by the fact that the French Academy of Science prize was awarded conjointly to Behring and Roux.

The points in law scored against the applicant by the special examiner are, substantially, as follows:

1. The process for which patent is claimed consists of methods of which applicant is not the sole nor first inventor. It is an elaboration of basic principles which are the results of the labors and discoveries of many, and hence is not patentable.

2. The process for which patent is asked is simply a particular application of a general process which is part of the professional knowledge, and applies to the production of other antitoxins than that of diphtheria. The applicant is not the sole inventor, and the process is not patentable.

3. The elaboration of a process so as to make it operative for commercial purposes, when the principles underlying it are common knowledge, is not a patentable novelty.

4. The substances produced by the process for which patent is claimed, can not be described by its physical or chemical properties, but only in terms of results obtained when medicinally employed, and for this reason is not patentable.

5. A method of medical treatment is not patentable. Diphtheria antitoxin is produced by and for a method of medical treatment.

6. The Alberto Levy prize expressly states that Behring and Kitisato published the results of *their* labors, hence either alone was not inventor.

7. It appears that a similar material was patented in England by Aronson under date of February 1st, 1894, hence the applicant is not the sole operator in this field.

The last application was finally rejected by the special examiner, March 19th, 1898, on the grounds of the counter-claim above stated. Four days later the claim was taken before the Board of Appeals and allowed, because, forsooth, the process referred to has been instrumental in very much reducing the mortality from diphtheria. Now it remains for the Supreme Court to decide whether this is sufficient ground for a patent.

The matter is one in which every American citizen should be profoundly interested. The manner in which domestic medical journals have already taken up the subject editorially, shows in what general esteem diphtheria antitoxin is held by the medical profession.

In his native country Behring could not possibly receive a patent, and the fact that he was allowed such a grant in the United States is a lasting reproach upon our patent laws, or their interpretation. Had the domestic product proven inferior in a single particular to the Berlin product, there would seem to be a semblance of an excuse for the least encouragement of this inhuman monopoly. But such is not the case—indeed, is the reverse. American producers have taken the initiative in every improvement that has yet been made in antitoxic serum. Concentrated and standardized serums originated in Philadelphia, and are now known the world over. Only within the last twelve or fifteen months have they been on the list of Berlin antitoxins. Again, the foreign product has never yet compared favorably with the domestic in clinical results, doubtless because of the facts already stated.

Bearing these facts in mind, the gross injustice of any Act which closes American laboratories in order to give an inferior imported product an exclusive monopoly, becomes strikingly apparent.

TORONTO GENERAL HOSPITAL.

In the early survey of the present site of the city of Toronto, various portions of land, consisting of about 399 acres, were set apart for the purposes of a general hospital in different parts of the town. This had lain unused until 1817, when a Minute in Council was passed ordering that these lands should be given in trust to certain persons to carry out the design of their allotment. At the close of the war of 1812-14 the sum of £4,000 was also given for the purposes of a hospital by the Loyal and Patriotic Society, which had been organized at this period to provide for the widows and orphans of those slain in that war, this amount being the balance of its funds which had not been disposed of. With this sum a building was erected in 1819 by Mr. John Ewart, on the block bounded by King, John, Peter and Adelaide streets. It was 107 feet long, 66 wide, and cost £3,000. It was left unused until 1824, when, owing to the destruction of the Parliament Buildings by fire, it was used as such by the Government.

In 1829 it reverted to its original purpose, and was opened in August of that year for the reception of patients. Here it remained for a number of years, until the land on which it was situated having become very valuable, it was decided to erect a more commodious building in a less frequented part of the town. The pres-

ent site of the Hospital was then selected, and in 1854 the central portion of the main pile of buildings was erected after a design by Mr. Wm. Hay. The Hospital continued in operation until 1868, when, owing to lack of funds, the trustees were compelled to close the institution for the reception of patients on the 1st of August of that year. A vain appeal having been made to the City Council for assistance, the condition of affairs was brought up for consideration before the Local Legislature, with the result that the management of the institution was changed, and instead of a directorate composed of three Government trustees, one member of the Board of Trade and one of the City Council, the welfare of the institution was confided to a Board of Trustees of five members, made up of three Government trustees, the Mayor of the City of Toronto, and a member elected by the subscribers to the Hospital funds.

BIRD'S-EYE VIEW OF TORONTO GENERAL HOSPITAL.

Assisted by the provisions of a Provincial Act of Parliament, through which such institutions receive aid in proportion to the extent of improvements carried out, the management soon had the affairs of the institution on a much firmer and surer financial basis. Thus encouraged, the Hospital was again opened in August, 1868, about one year after its closure.

The new directorate found abundant opportunity for the direction of their energy in attending to the improvements, or rather repairs, which were then found absolutely necessary; the floors had settled, the wood of the galleries had decayed from wet and lack of paint, the roofs leaked and the drainage was in bad condition. These and other marks of decay, the care of the Board, though crippled by lack of funds, soon repaired. Direct improvements were not to be thought of in the face of such pressing neces-

sities. But in the year 1875 aid came from an unexpected quarter; through the generosity of the late Mr. Erlandson, of Port Hope, and Mr. Gentle, of Montreal, the sum of $16,000 was given to the Hospital, which enabled the trustees to make many very necessary and important alterations and improvements. Heating by steam instead of by stoves, as formerly, was now introduced, bathrooms and closets were erected, kitchen conveniences perfected, an increased supply of water obtained, a better drainage system provided, and reception rooms for outdoor patients built.

Again in 1877, through the liberality of Messrs. Cawthra, Gooderham and Worts in donating a large sum to the Hospital, the western division of the main body of the Hospital was erected. This portion was considerably enlarged in 1885 by an important extension to the west.

In 1878, following the advice of Mr. Inspector Langmuir that the various hospital charities of the city should be amalgamated under one management, the Burnside Lying-in Hospital and the Andrew Mercer Eye and Ear Infirmary were erected on the Hospital grounds as part of the General Hospital of the city.

In 1882 the building called the "Pavilion" was built from funds donated by Messrs. John Macdonald, Wm. Gooderham, and others, for the purposes of abdominal surgery. To this portion of the establishment an extensive addition has lately been made, particulars of which will be found in the description of the Hospital.

Description of the Hospital Buildings.

The Hospital (a bird's-eye view of which we reproduce for our readers), facing south, occupies the block bounded by Gerrard, Spruce, Sackville and Sumach streets, and with all these additions and extensions comprises six separate buildings with a capacity of 400 beds. The main pile of buildings, which to a careless observer would seem to be one long structure, is in reality made up of three distinct divisions. The central portion with its three wings running north is the original building of the General Hospital, built in 1854, but since improved and enlarged. The western division, built in 1877, is the earliest of the additions made to the main portion, and is at present used as the nurses' residence, and for other hospital purposes to be afterwards mentioned; whilst the eastern division comprises the added Andrew Mercer Eye and Ear Infirmary, and the Medical Superintendent's residence fronting on Sumach Street.

Extending under these three buildings is one continuous basement, the portions at each end, corresponding to these divisions of the main pile of buildings, being united to the central portion on the west by a half underground tunnel, and on the east by a similar passageway. Here the ground space of the Hospital may be best viewed in its fullest extent. In the basement, beginning at its western extremity and under this division, are situated the

nurses' dining-room, kitchen and pantries, and the work-shops. Under the central portion, with its wings extending north, are situated the upholsterer's room, the general kitchen with its cooking range, the servants' dining-room and bedrooms, the furnace, coal and china rooms, and in the wing the machinists' rooms and storage rooms for coal, groceries, meat, milk, and vegetables. Under the eastern division lie the waiting rooms for eye and ear patients, servants' parlors and bedrooms, and the carpenter shops.

Throughout the length of the basement is a tramway which connects its different divisions and facilitates the conveyance of the heavier articles from one part of the institution to the other.

Above the basement the building rises to the height of four stories with five towers, the central being upwards of one hundred feet in height, from which a splendid view of the city, Lake Ontario, and the surrounding country may be obtained.

The Hospital is built of white brick, in Old English style, partly modified, its most novel and original features being the roofed towers before mentioned, which give a singular boldness of character and outline to the entire structures. These, though simple and free from extraneous detail, are grouped into a pleasing combination; whilst the battlemented turrets, gilded tower, crowns and railings produce picturesque effects of light and shade, glimmer and darkness, in the morning or evening sunlight.

Inside the general entrance, with its flight of stone steps and roofed glass porch, situated under the central tower, is the general hall, with its tablets on either side erected to the memory of generous benefactors, and at right angles to this, extending throughout the length of the building is the central main hall of the first floor. Directly opposite the general entrance is the stairway leading to the theatre for clinical instruction and operations, and to the upper wards, and on either side of this stairway the clinical clerks' room and students' laboratory. On the left of the general hall, extending to the west, are the general office, the Medical Superintendent's office and splint room, the Secretary's office and the dispensary. On the right, extending to the east, are the medical assistants' and the Lady Superintendent's apartments. In the wing, running north from the main hall, are the emergency ward and the ward for electrical treatment, and nine private wards distinguished alphabetically. In the east wing, the linen-room, etc., the Lady Superintendent's office, the medical assistants' dining-room, and private wards. Across the connecting passage in the western division of the Hospital are the nurses' parlor and reception-room and other apartments, which occupy all the first floor and upper flats of the most westerly portion of this division. The eastern extremity of the main hall terminates in the Andrew Mercer Eye and Ear Infirmary, and on either side of it are the consulting and operating rooms for eye and ear, nose and throat patients, both internal and external, the housekeeper's apartments, wards and medical assistants' apartments; whilst above on the second floor are the dining-room and

wards for patients in this department of the institution. On the second floor, reached by ascending the main stairway, are, on either side of the main hall of this flat, beginning at the western extremity of its central portion, male surgical ward No. 1 on the south side, male surgical ward No. 2 on the north, occupying the wing, and male private ward No. 3 connected with this. Adjoining ward No. 2 and on the same side of the hall, are the nurses' kitchen and dining-room for the patients of this flat. Opposite the stairway on the south side of the hall is semi-private male ward No. 4, and at its other end male medical wards No. 5 (occupying the wing running north), No. 6 and No. 7. Across the passage in the western division of this flat are the male surgical wards Nos. 20, 21 and 22, and a small operating room; whilst in the eastern division are, as before stated, the wards and dining-room of the eye and ear, nose and throat patients. On the third floor, also reached by the main stairway, are, beginning as before, female medical ward No. 9, female surgical ward No. 8 in the wing, and private ward No. 8½ connected with this. Adjoining No. 8 female medical ward No. 10, opposite the stairway female semi-private ward No. 11, then female medical ward No. 25, and male medical wards Nos. 13, 14, 15, 16, 17, the last four occupying the wing. Across the passage to the west is female medical ward No. 24, and to the east male private ward No. 35, and male wards Nos. 34 and 36 for medical and surgical cases. The fourth floor, with the wards in the towers, is reached by two separate stairways extending upwards from the basement and also by elevator.

In the central wing of the main building, extending north, is situated the large theatre for clinical instruction and for the reception of outdoor patients, with a seating capacity of over six hundred. Beneath this are the students' hat and cloak rooms, outdoor patients' waiting-rooms and a small theatre. To this portion of the building another large addition has been added, which is two stories high, thirty-six feet long by thirty-two broad. The lower flat is divided into rooms for the examination of outdoor patients and rooms for medical and surgical purposes and private examinations. The upper flat contains two laboratories and rooms for clinical clerks. This building, with its modern conveniences, offers unequalled advantages for pathological research and medical and surgical instruction.

Behind the central portion of the hospital is the laundry and its departments and the disinfecting-room, and north of these the mortuary with its autopsy theatre for post-mortem examinations and teaching.

The hospital is lighted by gas, heated by steam and hot water, and the danger of fire is reduced to a minimum by the regular distribution of extinguishers, hose, pails of water and fire-escapes at convenient positions throughout the institution; whilst to render ready communication possible throughout, its different divisions are united by the Village system of telephones.

The total number of beds now in commission is four hundred.

The following table shows the number and distribution of beds in each department at the present time:

	Males.	Females.	Special.	Private.	Total.
General.....	131	74	38	14	292
Eye and Ear....	21	13	..	6	40
Lying-in.....	..	25	..	4	29
Pavilion.....	..	30	..	9	39
Total.....	152	142	38	33	400

A large electric elevator runs from the basement to fourth flat.

Down-Town Emergency Branch, 105 Bay Street.

This much-needed institution, which was opened on the 1st of last month under such favorable and encouraging auspices, is situated on the east side of Bay Street, a short distance north of King Street. Being within less than half a mile of Union Station, old and new City Halls, the water front, and the principal hotels and warehouses of the city, the location is very central. It is nearly two miles down town from the General Hospital. Within half a mile of this centre are three miles of streets with double tracks, upon which the Street Railway system centres; and in the whole district is a heavy traffic of waggons, drays and vehicles of all kinds, including innumerable bicycles, all being prolific sources of causing street accidents.

The new building is four stories in height and has a frontage of forty-two feet and a depth of fifty-four feet.

The front is of red brick and brown stone and is enlivened with awnings over all the windows and portico and a Union Jack is floating above in honor of its opening day.

Basement contains kitchen, dining-room, fuel room and cold storage and other store-rooms.

Ground floor has a large receiving room for patients in the rear, which is reached by a covered roadway under the south part of the building through which the ambulance will pass and drive up to a covered entrance, free from obstruction from the street. This floor also has one large ward, an emergency operating room, instrument room and a reception room or office near the front entrance.

There are bathrooms and toilet rooms on all floors.

Upon the upper floors are two large wards, three private wards and complete suit of rooms for medical and resident staff, nurses, attendants and servants. A dumb-waiter runs from basement to top story. The building is heated with hot water, and is provided with gas and electric lighting. A fire-escape is fitted up in the rear from the roof.

The building is neatly furnished throughout and is equipped with all modern appliances suitable for the treatment of all kinds of accidents and casualties occurring daily in a busy city like

Toronto. The position of the Hospital is all that could be desired, and is certainly an ornament to the street. We reproduce for our readers here in half-tone a photograph of the building.

The Emergency Hospital, being a branch of the Toronto General Hospital, is under the direct management and control of the

TORONTO GENERAL HOSPITAL EMERGENCY BRANCH, BAY ST., TORONTO.

Toronto General Hospital Trust. The chairman, Mr. Walter S. Lee, and the other trustees, Mr. Geo. Gooderham, Mr. J. T. Blaikie, Mr. Hugh Ryan and the Mayor, with Dr. Charles O'Rielly, the Medical Superintendent, and Messrs. Gregg & Gregg, architects, are to be congratulated on the successful manner in which the

building has been constructed and arranged for the immediate care of the sick and wounded. The staff will be drafted periodically from the most experienced at the Toronto General Hospital, so that this institution, though two miles away from the General, is in reality, part and parcel of the *Mother Hospital* established in 1817. Dr. O'Reilly chose Dr. H. Anderson and Dr. T. Bradley to be the house-surgeons on duty for the first period. Miss Mitchell is head nurse, with an assistant nurse, ward tender, cook and housemaid.

This branch is open to all members of the profession in the city, who may at any time send in and attend cases of emergency and accidents taking place in their practice. This privilege will no doubt be largely used by the profession, and will add much to the popularity of this Institution.

Medical Women and Their Own Sex.

There is a hospital in Melbourne devoted to the treatment of diseases of women, the managing committee of which almost entirely consists of women. But when the resident appointments are advertised for competition, the vacancies are not filled up with young medical women, but young medical men. It is stated that the candidates are appointed by ballot, and if there be in the field a man of good appearance and engaging manners, he may rely upon the support of a majority of the lady managers. Within the past few months three medical women of ability have applied for vacancies in the resident appointments, but in each case a male competitor was chosen instead. These facts are significant, but they are not encouraging to those of the opposite sex who study medicine in Melbourne.—*Medical Press and Circular.*

A Novel Cure for Whooping-Cough.

There are many curious customs and superstitions existing in this enlightened age, and among the most peculiar are some practised by the peasants of Ireland for the cure of various complaints. In certain districts of that country whooping-cough is treated in quite a unique manner. A few months ago much amusement was caused by a case which came before the Coroner's Court of Belfast, in which whooping-cough was treated in a child by passing the sufferer three times under a donkey. Mr. W. R. Le Fann, in his amusing book on Irish life, relates several other instances of a like nature, and draws attention to the fact that nearly all the most popular remedies are for the relief of whooping cough or chicken-pox. Some donkeys are believed to be possessed of curative virtues in a much higher degree than are others. A man living in County Cork owned an animal which could boast of more than a local reputation. This man used to lead his donkey through the streets of the city of Cork, crying out, "Will any one come under my ass for the chin-cough."—*Pediatrics.*

Public Health and Hygiene.

. . . IN CHARGE OF . . .

J. J. CASSIDY, M.D., AND E. H. ADAMS, M.D.

EXECUTIVE HEALTH OFFICERS' ASSOCIATION OF ONTARIO.

THE annual meeting of this association was held at Ottawa on September 26th, in order that the members might have an opportunity of attending the sessions of the American Public Health Association, which began on the 27th. An important paper was read on "Inspection of Meat for the Local Market," by Dr. Cassidy.

AMERICAN PUBLIC HEALTH ASSOCIATION.

THE twenty-sixth annual meeting of the American Public Health Association was held at Ottawa, Ontario, September 27, 28, 29, 30, 1898.

The Executive Committee had selected the following topics for consideration: The Pollution of Water Supplies; the Disposal of Garbage and Refuse; Animal Diseases and Animal Food; Car Sanitation; Steamship and Steamboat Sanitation: the Etiology of Yellow Fever; the Relation of Forestry to Public Health; Demography and Statistics in their Sanitary Relations; the Cause and Prevention of Infectious Diseases; Public Health Legislation; the Cause and Prevention of Infant Mortality; Transportation of Diseased Tissues by Mail; the Period During which Each Contagious Disease is Transmissible and the Length of Time for which each Patient is Dangerous to the Community; Sanitation, with Special Reference to Drainage, Plumbing and Ventilation of Public and Private Buildings; report upon some Method of International Arrangement for Protection Against the Transmission of Infectious Diseases; Disinfectants; to Examine into the Existing Sanitary Municipal Organizations of the Countries Belonging to the Association with a view to Report upon those most Successful in Practical Results; the Duties and Responsibilities of the Healthy Man for his own and others' Health.

Upon all the above subjects special committees had been appointed. Papers were also received upon other sanitary and hygienic subjects.

At the time of going to press the officers for 1898-99 had not yet been elected. We shall give further details of the meeting in our next issue.

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
EDITOR,
69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.LOND.,
BUSINESS MANAGER,
145 COLLEGE STREET, TORONTO.

Surgery—BRUCE L. RIORDAN, M.D.,C.M., McGill University; M.D. University of Toronto; Surgeon Toronto General Hospital; Surgeon Grand Trunk R.R.; Consulting Surgeon Toronto Home for Incurables; Pension Examiner United States Government, and F. N. G. STARR, M.B., Toronto, Lecturer and Demonstrator in Anatomy, Toronto University; Surgeon to the Out-Door Department Toronto General Hospital and Hospital for Sick Children.

Orthopedic Surgery—B. E. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

Oral Surgery—E. H. Adams, M.D., D.D.S., Toronto.

Surgical Pathology—T. H. MANLEY, M.D., New York, Professor of Surgery, New York School of Clinical Medicine, New York, etc., etc.

Medicine—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and W. J. WILSON, M.D., Toronto, Physician Toronto Western Hospital.

Gynæcology and Obstetrics—GEO. T. MCKEOUGH, M.D., M.R.C.S. Eng., Chatham, Ont.; and J. H. LOWE, M.D., Toronto.

Medical Jurisprudence—W. A. YOUNG, M.D., L.R.C.P. Lond.,Eng., Toronto.

Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician, Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTON, M.D., M.R.C.S.Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology, Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P.Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THORBURN, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otology—J. M. MACCALLUM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. IV. TORONTO, OCTOBER, 1898. NO. 4.

Editorials.

INSPECTION OF MEAT FOR THE LOCAL MARKET.

FOR a number of years, notably since 1884, the United States Government has enforced a system of inspection of all cattle, sheep, calves and hogs intended for export and interstate trade. The motive that prompted this action was founded on the commercial interests of the American people. As the meat industry, which ranks third in importance in the export trade of the United States, was threatened with serious opposition in Europe, it was deemed necessary to place it above all criticism or suspicion. Hence, through the agency of the Bureau of Animal Industries,

extremely rigorous laws were, and are being, enforced in the work of inspection. Through the operation of this bureau 102 registered abattoirs, distributed over twenty-six cities in the United States, were established in 1896, and 35,917,479 animals were inspected, of which 89,399, nearly one-quarter of one per cent., were condemned.

Strange to relate, outside of these inspection centres the butcher may practically do as he pleases, and nothing prevents non-inspected meat from reaching the markets of the large American cities.

Canadian export cattle are not inspected according to the rigorous methods of the Bureau of Animal Industries, and they are not equal, either in weight or quality, to the animals sent to Europe by the American stock raisers.

In Toronto there is an inspection of cattle by an officer of the local Board of Health. The report of the inspector for the year ending October 31st, 1897, shows that the following animals passed through the market for export and home consumption:

Cattle	134,335
Hogs	211,486
Sheep	90,497
Calves	5,762
Total	442,080

Of the above the inspector intercepted sixty-three cattle, which were affected with lumpjaw or other tumors. These were slaughtered and, if the disease was found to be entirely local, the affected parts only were destroyed. The carcases of four cattle and one hog were cremated. Thirteen cattle, eighty-seven sheep, ten calves and 132 hogs, which had been killed in transit, were consigned to the rendering tank to be converted into patent manure.

Of the meat intended for the local meat trade of Toronto, part is derived from choice beef cattle; but, unfortunately, the entire supply does not come from such a select source. Even the carcases of animals which die of puerperal fever and pneumonia are bought and dressed for the market.

Again, there were in 1896 in the Province of Ontario 920,346 milch cows. Now, when animals of this class have become useless for dairy purposes, as the result of wearing out under high pressure, old age, or disease, they are sold to drovers, who scour the country looking for such material, and shipped to Toronto or

some other town in the Province for slaughter and conversion into dressed beef and various kinds of sausage. Some of these cattle are sent to the regular cattle market and are there bought by butchers, while others are sent from the country direct to the little slaughter-houses in the city. It is quite likely that a high percentage of such dairy cattle are affected with tuberculosis, and some of them in an advanced degree. At present, however, no means are available to the consumer for discovering the existence of that disease in animals intended for slaughter. The owner of an animal may suspect that it is tuberculous; he may, in fact, have diagnosed that disease by the tuberculin test, but he keeps his opinion to himself and sells the animal in the local market to the best advantage. The condition of the city slaughter-houses is variously represented, an inspector of the local Board of Health stating that they are not nuisances, while a leading city veterinarian says they are extremely filthy and ill-kept, so much so that "if the people of Toronto knew the horrible surroundings and the disgusting conditions of the places where their meat is dressed, they would feel too nauseated to eat it."

If to protect ourselves against such neglect and wrong-doing we admit that inspection of cattle before slaughter and of meat before marketing are necessary, we are confronted with the question as to what system will best fill the requirements of the situation. The answer is that in many places (more than six hundred in Germany) there are municipal abattoirs, in which it is required that all the slaughtering shall be done. The preliminary inspection of animals intended for slaughter, and the passing of the meat intended for the local market, are easily secured when the work is done at one place, but they cannot be done by the most efficient and energetic inspectors if animals are being killed in thirty slaughter-houses at one time. An abattoir is not a very expensive affair. It is stated on the authority of the Provincial Board of Health of Ontario, that an estimate of the cost of an abattoir and pens, 50 by 20 feet, calculated for a population of five thousand, according to Toronto prices would be $1,572.50. At the Western Cattle Market, Toronto, an abattoir has been erected at a cost of about $50,000 by a private individual. It is a substantial brick building, and is fitted with the needful requirements, including an excellent system of cold storage. The accommodation is sufficient to provide for the dressing of two hundred carcases of cattle a day. It may be used for a small fee by the city butchers. There is no inspection of

meat. A simple examination of the cattle intended for slaughter, and a subsequent inspection of the viscera and meat by a competent veterinarian, would make this quite a model institution—so much so, indeed, that the City Council might, if it were legal to do so, order the butchers to use this abattoir and close their slaughter-houses.

In Ontario an Act for the Inspection of Meat and Milk Supplies of Cities and Towns, being chap. 63, 59 Vict., makes it optional for cities and towns to construct municipal abattoirs, simply requiring that any city or town establishing an abattoir shall construct and equip it according to the regulations adopted by the Provincial Board of Health, and have the inspection of animals and meat carried out as provided in section 108 of the Public Health Act. It may be stated, *en passant*, that this Act would be more workable if a section were introduced stating that "when an abattoir shall have been established in a municipality all the butchers shall be obliged to stop using their slaughter-houses; and all butcher's meat sold in the municipality shall have been dressed in the abattoir." So far not one of the 745 municipalities of Ontario has provided a municipal abattoir. The capital of the Province, might be supposed to set an example by initiating this important reform; but, so far, the Toronto City Council, though requested to do so, has not taken any action in the matter. Certainly, however, if the people of Toronto wish to have the assurance that the meat served at their tables is free from disease, there is no other method than to request the City Council to provide an abattoir, in which all animals intended for the meat market shall be examined before slaughter, and the meat inspected by a veterinarian before it is marketed. There are other important sanitary improvements which would follow the establishment of a city abattoir. At present there are about thirty slaughter-houses in the city. The offal and the blood at these places are collected every evening by a contractor, who removes them to an establishment where they are converted into a fertilizer. As these slaughter-houses are mostly situated in the suburbs of the city and the offal is removed every day, there is no malodorous nuisance in the populous portion of the city. From the standpoint of the meat trade, however, a city abattoir would offer superior advantages, in the interest of the butcher as well as his patrons.

It would do away with the poor, badly equipped, badly managed slaughter-houses, which in many cases are nuisances in their respective neighborhoods. It would make it unnecessary to drive

cattle through the streets, a practice that blocks traffic, frightens people, and at times occasions serious accidents. It would give small butchers the advantages enjoyed by the wholesalers; they could use the facilities of the large slaughter-houses, which are superior to their individual establishments, and the cold storage system could be used by all, with economy to the dealer and advantage to the consumer in the increased wholesomeness of the meat. The offal and the condemned organs and carcases could be disposed of to better advantage.

Moreover, it has been shown by repeated trials of this system that, instead of increasing the cost of meat, it tends to reduce it. A large system can be conducted by co-operation between butchers at less expense than when each has his own establishment. The European system of municipal ownership is undoubtedly most desirable. It has been found that the rentals from abattoirs are sufficient to pay the running expenses and to afford a reasonable return on the investment. The whole system is not only an advantage to the consumer of meats, but it subjects the butchers to no hardships whatever, and makes it more convenient and cheaper for them to conduct their trade. Although the butchers may be in favor of the seeming privileges which they possess at present, we feel confident that, after they have examined the question from every side, they will decide for an abattoir, *in their own interest* as well as for the advantage of their customers. Should this opinion be verified, we may expect to see established in Toronto a system of inspection, based on common-sense, not vexatious to those who have cattle to sell or expensive to those who prepare meat for the market, and such as will commend itself to those who wish to improve the public health. J. J. C.

TREATMENT OF THE MORPHINE HABIT.

Dr. Paul Sollier, in *La Presse Medicale*, gives some very instructive views on his method of treating patients, who have for many years been addicted to the use of morphine. When regularly injected in a continued manner, morphine causes, after a considerable time, a more or less important diminution of the activity of the nervous system, and a very marked slowing of the processes of glandular secretion. When morphine is rapidly withdrawn, there is frequently a resumption of the glandular functions; but this

does not happen immediately in all the organs at the same time, the different phenomena appearing one after the other. Most frequently perspiration and sneezing open the scene, accompanied with yawning. Then diarrhœa appears—at first ordinary fæces, then pure bile, afterwards loose motions, half bilious, half fæcal in character; mucous vomiting (gastric juice), then bile, where there is any, appears after the diarrhœa has started and stops before it. Spermatorrhœa appears afterwards, then salivation and muscular cramps. Each glandular apparatus begins operations in its turn, without any determined order in this succession of phenomena, which varies with each person and depends on the different degrees to which the different organs of the body are impregnated with morphine. The mechanism by which the system rids itself of morphine appears to be an epithelial and endothelial desquamation of the impregnated mucous membranes. These processes may be renewed during six or eight weeks after abrupt withdrawal of the drug, and when complete correspond to a *restitutio ad integrum* of the affected organs. Assuming that these premises are correct, it follows that the stronger the reaction of the organism the more abundant will be the desquamation at first, and the more rapidly will organic regeneration be brought about, the more quickly will the system renew itself in its elements, the more favorable will be the course of convalescence, the more completely will health be restored, and consequently all the more will the chances of a relapse be lessened. Just as in the infectious diseases, in which the return to health is more perfect, when the disease has pursued a more acute course, on the condition of course that the organism is in a suitable condition to react against the infection.

Hence the object that one ought to propose to one's self in treating a patient with morphine habit is to favor as much as possible the elimination of the altered glandular elements, to provoke the appearance of each secretion, if slow in appearing, or if it slackens its work when begun or stops too soon. To meet these indications it suffices to excite glandular activity by every known method, while at the same time lessening the quantity of morphine. Purgatives, diuretics and diaphoretics ought to be used concurrently. Under the influence of these medicines, and the rapid diminution of the quantity of morphine, the resumption of glandular activity begins before complete removal of the drug is enforced. The effort of the organism at this time is therefore less intense, the emunctories being already prepared. Hence it results that the heart is not forced to perform excessive work, and the pain provoked by

the reaction of the organism, striving to free itself of its altered elements, is reduced as much as possible.

Dr. Sollier since using this method has not observed even in patients with diseased hearts any signs of heart failure or syncope, and still less has he been confronted with the collapse which frightens so many morphine-takers when trying to get cured, and physicians who have not had any experience in such cases. When the morphine-taker is thus prepared for weaning, not only is there no serious accident to dread, but it is useless to give him any heart tonic, such as sparteine or caffeine, for heart failure need not be apprehended. When, on the other hand, weaning from morphine is begun without having taken previous precautions to prepare for glandular elimination, one is exposed to what may be called a false elimination of morphine.

Dr. Sollier explains this as follows: Weaning from morphine should not be confounded with elimination of the drug from the system. Weaning may be put in force, but elimination may not follow. Should this occur, convalescence does not take place, or else comes on in a slow, torpid manner, and besides even fatal results may happen. To illustrate this point, two cases are selected from several others, which we give in Sollier's own words: "I was summoned one day to see a physician, a morphine-taker for several years, who was finally obliged to give up his habit in order to continue his practice. Not wishing to go to a hospital he had undertaken to treat himself at home, and naturally adopted the slow method. He lessened the quantity of morphine for six weeks in a progressive manner, until he was taking from a third to half a grain of morphine a day. But he was extremely weak; he was constipated the whole time, and had lost appetite and sleep; was nervous, and his heart was irregular in action; he suffered from a general atony, and the bodily functions, instead of resuming their offices owing to a reduction in the quantity of morphine, were slower than ever. Threatened syncope appeared, when he wished to stop the morphine entirely. After having treated him in the manner described above, I prepared him for weaning. Everything passed without an accident. After eight or ten days the patient began to regain his appetite and enjoy a little sleep, and I thought he was out of danger. But at this juncture the heart, exhausted by six weeks of slow suppression, exhibited the phenomena of myocarditis, which caused death in three days. Nothing in his organic condition justified such a result, which was simply the outcome of exhaustion produced by the long struggle

of the heart and of the organism to bring on elimination, which did not occur. In spite of what may be said to the contrary, slow discontinuance of morphine is more exposed to accident and more dangerous than abrupt stopping of the drug.

"In the second case the results were happier and the demonstration still more conclusive. The patient was also a physician, a morphine-taker for twenty-five years, and sixty-three years old. Obliged to suspend his lectures and his occupation on account of weakness, many of his colleagues advised him to stop the use of morphine at once. He made the effort at his own house. But total stoppage of elimination occurred; constipation was obstinate, and pains of a hyperæsthetic character all over the body prevented sleep or rest. Appetite was abolished, and alimentation became more and more impossible. To get rest injections of chloral were given, but without results. After a month the condition of the patient was unchanged, emaciation was very marked, and weakness was notable. It was concluded to call in my services for fear of a rapidly fatal issue. I easily discovered, that if the patient was weaned from morphine he was by no means eliminating the drug. I began, therefore, the same as if weaning had just been commenced, and proceeded to excite the functions of all the glandular organs of the body. Everything happened just the same as if we were dealing with a morphine-taker, who had begun treatment the day before. After ten days he got up. Appetite returned, and, after two months and a half, he was able to resume his work, having gained twenty-six pounds in weight, recovering his appetite, sleep and strength."

Dr. Sollier is opposed to the use of other hypnotics when treating a morphine-taker, and does not, therefore, use napelline or phosphate of codeine. Adjuvants, such as sparteine and caffeine, are sometimes used if the heart is weak. Antipyrine and bromide of potassium are used when there is a tendency to cerebral congestion. He is totally opposed to the use of sulfonal, bromidia, chloral, etc., and thinks that sulfonal is the most dangerous drug in this category.

The rational treatment of morphinomania, according to Sollier, consists in provoking and favoring as much as possible, the secretions of all the glands, in depriving the patient of the drug as soon as possible, in avoiding subsequent interference except to keep up elimination, and observing the patient through all the period necessary for glandular regeneration. J. J. C.

AMBULANCE CLASSES—A BEAUTIFUL FAD!

With the coming of the summer the voice of the lecturing physician on "First Aid to the Injured" was silent in the land; and evidently with his devotees it is out of hearing, out of mind, otherwise some of his precepts would have been put into practice when occasion required, as it has frequently during the past few months. Perhaps, however, we are censuring without just cause, so we pause to ask a question: "What has been taught in these "Ambulance Classes"? Has, for instance, the rescuing and the resuscitating of the drowning been made the subject of lecture and study? If so, passing strange, is it not, that any should perish, judging by the enormous attendance accredited to these classes. In fact, half the population seem to have been seized with a longing for a wider sphere of usefulness. Pity 'tis, that their fancy has taken such a morbid direction. The public press has kindly chronicled long lists of those who have "passed the necessary examinations." Here may we venture another question: "What are the graduates qualified to do?" Are their qualifications simply to stick a pin in a bandage, without causing the oftentimes ungrateful subject of their ministrations to "see stars"? One would be inclined to pity the long-suffering physicians who have so courteously given their time to a cause so apparently useless. Are these classes, that have been the fad of the past two winters, needed? They have been attended alike by all grades of society, from the ladies of Toronto, the Y. M. C. A. men, etc., down to the housemaids. Perhaps the wisest thing the physician can do is to bow the misguided ladies back into the social circles, which they so gracefully adorn, or pray for a new fad to become epidemic.

As for these Guild classes, what is the use of physicians bothering themselves to talk to housemaids? Little can be accomplished except a cheapening of the dignity of the medical men themselves. As for the young men mentioned, possibly better results might be obtained, as few "boys grown tall" trouble themselves to listen to lectures or learn anything unless they intend to make some practical use of the knowledge attained. However, we think these classes are not needed, and too often the truthfulness of the good old maxim has been proven—"Little knowledge is a dangerous thing."

We do not wish to censure sweepingly, as there are several classes in our community to whom lectures upon "First Aid to

the Injured" should be given; for instance, railway men, steamboat employees and all such as are exposed by reason of their occupation to unusual danger.

Nevertheless, we are firmly of the opinion that, thoughtlessly perhaps, a number of our physicians are lowering the standard of the medical man by freely imparting to the laity too much medical knowledge. If this fad continues it may soon come into vogue to consult one's patients as to what they would prefer as an antidote to poison, or perhaps, in a case requiring surgical treatment, a serious argument may occur between physician and patient, the latter feeling his superior knowledge, owing to his having been a "grad" of the ambulance class of the winter of '89.

As physicians, let us remember where we put ourselves we must stay. Already the wise worldlings engaged in other professions are laughing at our prodigal liberality; so let us, ere it is too late, keep the knowledge that it has taken years of study to acquire, imparting it cheerfully only to those who intend to espouse our noble calling as a lifework. We have already cast our bread to feed the stranger, for have we not given, with scarce a protest, the name "Doctor," to be framed, chromo-like, to enhance the barndoors of quackdom? W. A. Y.

THE ONTARIO MEDICAL LIBRARY ASSOCIATION.

Again we desire to refer to the Library, and remind our city confreres that they have it within their power to make use of the volumes of the Association by the payment of a merely nominal fee, and, that our country friends, by a post card to the secretary, may do likewise at the mere cost of the express charges. In addition to this the library of the Surgeon-General of the United States at Washington may, through the Ontario Medical Library, be consulted in the same way. A substantial deposit has stood in Washington to the credit of the Provincial Library, for the purpose of recouping it for the possible loss of any of its books. This arrangement has existed for some time, and yet few of the profession, excepting perhaps the officers of the Association, are aware of the easy manner in which they may consult the works of the largest medical library on the continent, with little or no trouble or expense, the secretaries of the two libraries doing all the work therewith.

The work and worry to the profession here in regard to consulting any book or reading up any subject is reduced to a minimum, thanks to the energetic secretary. It is not necessary for physicians to go themselves and look over shelf after shelf until they find what will help them. If they simply write or telephone the subject they wish to investigate the secretary will do the looking up and advise promptly of the result. It is a great comfort at times to be able to lay one's hand on the latest literature bearing upon some peculiarly puzzling case.

"THE CANADIAN PRACTITIONER" versus THE CANADIAN MEDICAL ASSOCIATION.

It was certainly no news to the profession when *The Canadian Practitioner* in last month's issue, in referring to The Canadian Medical Association, used these words: "We were never particularly enthusiastic over the meeting," going on to point out that the attendance was always small, and, in fact, to hint that the Association was rapidly losing its interest and dwindling into insignificance. In order to enlighten the author of the editorial in question upon the subject he strove to write about, we need only say that during the past five years the average attendance has been 114, and for the ten years previous to that the average number of members registered was but 90. It might be well if the editors of our contemporary were to mend their own ways before criticising, as by their consulting the members' register they will find that at least five years have elapsed since they last helped to swell the attendance roll. One of the gentlemen referred to might also, perhaps, promise fewer papers, but turn up more frequently at the meetings. Don't grumble, but come.

A MOVE IN THE RIGHT DIRECTION.

We are pleased to notice a new departure in the extern department of the General Hospital. Each patient on his first visit is given a blank form to be filled out and signed by a doctor or clergyman certifying that said patient is at present unable to pay for medicine and attendance. This certificate must be presented at each subsequent visit.

We congratulate Dr. O'Reilly on his good beginning in hospital

reform, and feel assured, now that he has taken the initiative, that he will continue this much-needed work and extend it to indoor patients who, in many cases, are imposing on both hospital and doctors to even a greater degree than the externs. The example of the General Hospital has been promptly followed by the Western, and it is to be hoped the other hospitals and dispensaries will soon fall into line. W. J. W.

We have been honored by receiving recently a large number of original papers from many well-known writers of medical lore all over Canada, as well as the United States. This feast of good things we know our subscribers appreciate, as we are enabled thus to give them each issue between 70 and 80 pages of the most recent and up-to-date material procurable. Several papers, which we have in type at present, but owing to lack of space are absolutely prevented from publishing till next month, include "Progress of Medico-Legal Surgery," by Clark Bell, Esq., LL.D.; a paper by Dr. J. J. Morrissey, of the New York School of Clinical Medicine; "Infection and Serotherapy," by Edward Leberge, M.D., Montreal; "Diphtheria, with Special Reference to the Laryngeal Cases requiring a Choice between Tracheotomy and Intubation," by A. Gaudier, M.D., Sherbrooke, P.Q.; a paper by Ferd. C. Valentine, M.D., New York (the last three having been read at the Quebec meeting of the Canadian Medical Association).

W. A. Y.

Dr. A. A. Macdonald is again out for representation on the Medical Council for West Toronto.

Drs. G. A. Peters, R. A. Reeve and K. C. McIlwraith, of Toronto, returned last month from England.

Dr. Graham, who recently moved on to College Street and has resided in the house until lately occupied by Dr. Geo. Carveth, intends leaving the city.

The result of Toronto University Senate elections will be known in a day or two. Besides the former candidates representing the Medical Faculty, Dr. J. M. Macallum is in the field.

Dr. J. O. Orr, of 337 Jarvis Street, will return home about October 22, and resume his general practice at his old residence. The doctor has been spending the greater part of the year in the hospitals of England and the Continent.

Correspondence.

The Editor cannot hold himself responsible for any views expressed in this Department.

HOW THINKING IS DONE AND OUGHT TO BE DONE.

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY :

DEAR SIR,—Cabani's conception that "the brain secretes thought as the liver secretes bile" is erroneous. Bile is a tangible substance while thought is not. Had he said the brain produced nerve secretion, as the liver secretes bile, then his assertion might have had some scientific significance. The brain is simply the great nerve centre of the human or animal system. Until God breathed thought into the mind, at the same time as He breathed life into the inanimate brain, which, somewhat like the mainspring to the watch, set the machinery in motion that guides the circulation, the brain could never have evolved thought. The stomach can evolve as much thought when fruit-cake is eaten before retiring. Thought is not evolved by physiological and pathological changes directly, but the Deity in a human being takes cognizance of these changes and governs the mind accordingly. If thought were the product of physiological and pathological change, then thought must be a tangible substance. But what microscope has ever discovered thought as it has all proliferation? Man, therefore, is not only human, but divine. The life of God was breathed in and man became a living soul, with the capabilities of a free-will agency to enjoy independent thought. So that vain philosophy does not and never can, no matter how much research there may be made by so-called scientific materialists, locate the exact formation of thought in the human system. It is an extraneous element, altogether, that finds the brain a proper vehicle through which to operate. The sun's rays are extraneous to the earth, and yet his rays very decidedly effect the earth. "Out of the same mouth proceed blessing and cursing." What physiological change could produce such opposite results at the same time? By the aid of the senses thought is, for the most part, if not entirely, occupied. And yet out of the heart proceed evil thoughts, murders, adulteries, etc. Sin being the disturbing element in man throws him out of harmony to God's will, and the thoughts can only be brought into harmony to the will or thought of God by the power of the spirit of God through the atonement of Jesus Christ and repentance and turning away from all sin and sinful suggestion. In this way alone can the evil heart of unbelief become changed. No medical treatment of that part of the heart of the most scientific character can, in itself, effect in the slightest degree that form of disease. The

Great Physician alone can cure that form of disease, and the sanctified common-sense of the truly scientific physician will at once recognize how one-sided and materialistic a physician is who undertakes the practice of medicine without being soundly converted to God and consecrated through His help to his profession. The time has come when the empiricism of divine healers, so-called, Christian Science and other forms of delusion, should be taken up and thoroughly exposed, and with your permission, Mr. Editor, I will write again shortly and do so.

163 Wilton Ave., Toronto. R. H. Robinson.

[We always appreciate hearing from our subscribers, but as this journal is purely a medical and surgical publication, we courteously request our correspondents to confine themselves to subjects distinctly pertaining thereto.—Editor.]

OBITUARY.

Dr. Geo. W. Sanderson died at his residence, 299 Huron Street, Toronto, on Wednesday, September 14th. He was born at the corner of Elm and Yonge streets, in Toronto, 72 years ago. His medical studies were carried on in Toronto and at McGill University, in Montreal, and after graduating from the latter institution he spent a year in Great Britain, taking the M.R.C.S. degree. Returning to this country he commenced practice in Woodstock, where he speedily drew around him a large circle of patients. After some years he moved to Orillia, where, "a doctor of the old school," he ministered to the sick and suffering over a wide area of northern Ontario, at a time when the population was scattered and conditions of life in the district were primitive. About twenty years ago he retired from active practice and moved to Toronto. He was naturally of very robust constitution, but a succession of illnesses dissipated his stock of vitality. The severe physical exertion consequent upon his practice in the Muskoka district at one time gave rise to acute dilatation of the heart, which laid him aside for many months, but from which he apparently completely recovered. About five years ago he sustained a fracture of the neck of the femur, the slight resulting lameness continuing until his death. The accident which caused the fracture gave his system a shock from which he never fully recovered. Three times following the fracture he became so debilitated from extreme anæmia that his life was despaired of, but each time he recovered. His last illness, a persistent and uncontrollable diarrhœa, overtook him at a time when he appeared better than he had been for several years His wife, to whom he was singularly devoted, preceded him in death exactly four months. He leaves two sons (J. R. Sanderson, of London; F. G. Sanderson, of Montreal) and three daughters, Mrs. J. B. Wallace, of Orillia; Amy Louise Sanderson, and Mrs. (Dr.) Galloway, of Toronto.

The Physician's Library.

BOOK REVIEWS.

In order to show what an almost unlimited expenditure has to be made in the publication of certain medical works, we take pleasure in publishing a letter recently received by us from the well-known firm of W. B. Saunders, of Philadelphia, which explains itself and goes to show what a mine of medical knowledge this firm intend producing during the next few months in the shape of certain books:

PHILADELPHIA, *Sept. 7th, 1898.*

DEAR SIRS,—Encouraged by the large sale of the first two volumes of my new series of Hand Atlases (two editions of Jakob's "Internal Medicine" having been sold in less than four months), I visited Germany this summer and made a contract with the central publisher, agreeing to purchase from him one hundred thousand copies of the lithographic plates. There are not more than a hundred thousand physicians in this country, and this seems an extraordinarily large undertaking. When, however, you take into consideration the beautiful colored plates, which are produced by the most skilful artists obtainable in Germany, and the fact that the books are sold at a price which would have been impossible unless there had been a combination of some eleven publishers, it does not seem to me a difficult undertaking, as I am convinced that when the profession sees these works they will meet with a very large sale. The mechanical execution of these lithographs is of the very best, and the illustrations are equal to, if not better than, those in the larger atlases which heretofore have sold for from $30 to $40. I personally examined the plates which are now being produced for "External Diseases of the Eye" and the "Atlas of Skin Diseases," and found them marvels of beauty. By reason of my new contract the central publisher has agreed to insert in all new volumes an additional number of colored plates, thus making the newer volumes more beautiful than those that have already been published, and yet they are to be sold at the same price.

Besides the atlases which were sent to you this summer for review, I have sent you the revised edition of Da Costa's "Modern Surgery," the second edition of McFarland's "Pathogenic Bacteria," and I now have ready, and will send you in a few days, the second edition of "An American Text-book of the Diseases of Children" and "An American Text-book of Gynecology." Both of these text-books have been thoroughly revised and a large amount of new material added. I will also send you in a few days the fourth revised edition of Vierordt's "Medical Diagnosis." This work has been entirely re-written and very much enlarged. Vierordt has gone through three very large editions in this country, and is now a recognized standard text-book on medical diagnosis both in this country and abroad. Dr. Stuart's translation has met with a very good reception in the English market, where I have placed several large editions. You will also shortly receive the second edition, revised, of Griffith's "Care of the Baby" and Butler's "Materia Medica and Therapeutics." I am pleased to announce that we have almost ready, and will publish on or before October 1st, Stengel's "Text-book of Pathology." This will be a work of about eight hundred pages, and will be a model text-book on modern pathology. We will also have ready on or about the 16th of October a "Text-book of Obstetrics," by Barton Cooke Hirst, Professor of Obstetrics at the University of Pennsylvania. This will be a profusely illustrated text-book on obstetrics, of about eight hundred pages. Dr. Hirst has embodied in this book a series of original illustrations which he has collected in his work as Professor of Obstetrics at the University of Pennsylvania. I expect these two works—Stengel's Pathology and Hirst's Obstetrics—to be leading text-books on their

respective subjects during the coming season, as they are both written by men of well-known ability in their respective lines.

"The American Pocket Medical Dictionary" will be ready before the first of October. This is an entirely new work, designed as a handy volume for physicians and students. It will contain a total of over twenty-six thousand words, or about five thousand words more than any other pocket dictionary. It will form a handsome volume bound in full limp leather.

We shall have ready, on or about January 1st, "An American Text-book of Diseases of the Eye, Ear, Nose and Throat," edited by Drs. de Schweinitz and Randall; also Church and Peterson's "Mental and Nervous Diseases." Both of these books will be well illustrated.

I shall be glad if you can give me a preliminary announcement of these forthcoming works, together with a special notice of my Medical Hand Atlases. I more particularly desire to call the attention of physicians in this country to the hand atlases, and to explain to them how it is possible to supply these books at so low a figure. I would be pleased, however, if you can lay stress on the fact that the initial cost of publication in the making of the expensive colored plates is borne by eleven publishers instead of one, as is usually the case, thus making it possible to produce them at so low a price.

With kind regards, and best wishes for the coming season,

I am, yours sincerely,

W. B. Saunders.

International Clinics. A Quarterly of Clinical Lectures on Medicine, Neurology, Surgery, Gynæcology, Obstetrics, Ophthalmology, Laryngology, Pharyngology, Rhinology, Otology and Dermatology, and specially prepared articles on Treatment and Drugs, by professors and lecturers in the leading medical colleges of the United States, Germany, Austria, France, Great Britain and Canada. Edited by Judson Daland, M.D., University of Pennsylvania, Philadelphia; J. Mitchell Bruce, M.D., F.R.C.P. (Lond., Eng.); and D. W. Finlay, M.D., F.R.C.P. Volume II., Eighth Series, 1898. Philadelphia: J. B. Lippincott Co. Montreal: C. Roberts, 593A Cadieux Street.

Rapidly following the publication of Vol. I. of this Eighth Series of "Clinics" comes Vol. II., and it is a difficult matter to pronounce as to which is the better. Amongst the contributors to the second volume are such men as Drs. A. H. Barbour, of Edinburgh; Seth Scott Bishop, of Chicago; Henry C. Coe, of Bellevue Hospital Medical College; Prof. Ewald, of Berlin; Webster Fox, of Philadelphia; Pearce Gould, of London, England; W. W. Keen, of Jefferson Medical College; T. P. Pick, of London; A. Pinard, of Paris; Nicholas Senn, of Chicago; and last, but not least, our own fellow-townsman and litterateur, Dr. Alex. McPhedran, who has contributed a chapter of no little importance, entitled "The Treatment of Acute Failure in Chronic Heart Disease" Under the same heading of treatment, amongst other articles, come also the Treatment of Tuberculosis, by Prof. Grancher, and the Operative Treatment of Sclerotic Catarrh of the Middle Ear, by Dr. S. S. Bishop. Under the heading of Medicine, there is a most instructive lecture by Prof. Ewald, the author of the work on diseases of the stomach, entitled "Some Forms of Gastralgia." Dr. James Cantlie also contributes a chapter in Medicine on that disease found so much in China, some parts of India and the Straits Settlements, known as psilosis or sprue. We also read carefully and with interest a lecture by Dr. F. M. Crandall on Malarial Fever in Children. The contributors to the department of Neurology are Prof. R. Von Jaksch, who gives a clinical lecture on Toxic Polyneuritis, and Dr. T. W. Mott, who has an article on Arsenical Neuritis. Drs. Nicholas Senn, W. W. Keen, Pearce Gould and T. Pickering Pick are the principal writers under the department of Surgery. Dr. Senn treats of the Etiology and Classification of Cystitis; Dr. King, on a case of appendicitis, where the appendix became attached permanently to the bladder like a third ureter. Mr. Gould lectures on the Choice of Method of Amputation, and Mr. Pick on Syphilitic Stricture of the Rectum. Under Gynecology

and Obstetrics Dr. Barbour, of Edinburgh, comes to the front with an exceedingly able chapter on a case of labor in a universally contracted pelvis, which shows great study and original thought. Dr. Coe, under this heading, speaks of sterility. Ophthalmology is contributed to by such well-known men as E. Treacher Collins, L. Webster Fox and W. C. Boteler. Dr. W. Milligan contributes an article on Suppurative Inflammation of the Frontal Sinuses under Laryngology, and Dr. J. F. Schamberg, in Dermatology, gives a chapter on the Varieties, Causes and Treatment of Baldness. As we have already said, the series of International Clinics will be found to be a *multum in parvo*, the great advantage being that it is not like a large work, where one has to turn from one volume to another to complete an article, but each volume of "Clinics" is a separate and distinct work by itself, worth a great deal more than the price of the book.

William Stokes. Masters of Medicine Series. By his Son, Sir William Stokes. Illustrated. New York: Longmans, Green & Co., 91 and 93 Fifth Avenue.

It would be difficult to find the biography of an Irishman dreary reading. In this one the writer aims to tell of William Stokes, the physician, but somehow the reader is more impressed by the many glimpses of William Stokes, the man. In early life, in Dublin, surrounded by a social atmosphere which contained the wit and culture of the time, the love of poetry and art were innate in him. The author understands the charm of letting his subject prove self-revealing, and so, many of his letters are given in the book, full of exquisite descriptions of places visited. He felt the beauties of nature and described them with a keenness and tenderness beyond the depth of ordinary men. With all his intense love of mankind he had strong dislikes toward some; for instance, his opinion of Thomas Carlyle (his guest for a short time in 1849) seems worth repetition. Of him Dr. Stokes said, "I have met many *bores*, but Carlyle was *hyper borean*."

As a physician, lecturer and writer Dr. Stokes played an active and creditable part. His first small publication was on "The Use of the Stethoscope." It is of interest in this machine-made age to notice how long it took before the stethoscope, then a novelty, was adopted by the profession. Perhaps his greatest work was a treatise on the diseases of the chest. In his work on the heart and the aorta, the Cheyne-Stokes respiration is referred to. In the section on cardiotherapeutics the principles are found which are practically identical with those now known as the Schott method. A leisure hour could hardly be spent to better advantage than in reading the busy life of this Master of Medicine, lived in a land for which "God has done so much and man so little." W. A. Y.

Clinical Lectures on Diseases of the Heart and Aorta. By Geo. Wm. Balfour, M.D. (St. And.); LL.D.(Edin. and St. And.); F.R.C.P.(Edin.); F.R.S. (Edin.); Consulting Physician to the Royal Infirmary, Edinburgh, etc., etc. Third Edition. London: Adam & Chas. Black, 1898. Toronto: The Publishers' Syndicate, Limited.

Considering the reception given to former issues of this work, it is little wonder that Dr. Balfour found it necessary to rewrite it and publish still a third edition. The name of the author and his standing as a clinical teacher is in itself quite enough to induce a large sale, and when it is known that to this edition considerable additions have been made and parts entirely rewritten and brought right up to date, it can be safely said that this edition also will soon be inprocurable. The rules given for the use of digitalis in order to prevent any cumulative effect in cardiac disease, as also regarding the employment of potass. iodidiv in cases of aneurysm will be most useful to practitioners. The mere fact that all the cases referred to are those which came under the author's notice, and which in many instances were afterwards corroborated in the mortuary, will go to show that he has not attempted in any way to draw upon his imagination, but give fact and fact only. We cordially recommend the work to professors, clinical teachers and practitioners alike.

A Manual of Modern Surgery, General and Operative. By JOHN CHALMERS DA COSTA, M.D., Clinical Professor of Surgery, Jefferson Medical College, Philadelphia; Surgeon to the Philadelphia Hospital. 386 illustrations. Philadelphia: W. B. Saunders, 925 Walnut Street. 1898. Canadian Agents: J. A. Carveth & Co., Toronto.

That it is the greatest encouragement to an author on any subject to find it necessary, so soon after the launching of the first volume on the market, to publish again and practically re-write his work, goes without saying. Dr. Da Costa, in the first edition of this manual, made up his mind that his book should not be anything like a system of surgery, and that he should not attempt to cover the field in so complete a manner as would be required by a work comprising surgery in its entirety; so he decided, and that wisely, that it should be classified neither as a text-book nor a compendium, but as something between the two. In many parts he has re-written the chapters, adding many things which are quite new, and leaving out parts which were not as practical as he considered requisite. Chapters have been added upon the female breast, the spleen, the pancreas, wounds as inflicted by modern projectiles, and one on the use of the Roentgen Rays. Dr. Da Costa has described such operations as Bodine's method of colotomy, Senn's method for re-section of the hip-joint, methods of gastrostomy, Owen's operation for hare-lip, and others. Altogether we are fully satisfied that the second edition will meet with as flattering a reception as did the first, as in every point it is excellent.

Atlas of Syphilis and the Venereal Diseases, including a Brief Treatise on the Pathology and Treatment. By PROF. DR. FRANZ MRACEK, of Vienna; authorized translation from the German. Edited by L. Bolton Bangs, M.D., Consulting Surgeon to St. Luke's Hospital and the City Hospital, New York; late Professor of Genito-Urinary Surgery and Venereal Diseases, New York Post-Graduate Medical School and Hospital. With 71 colored plates. Philadelphia: W. B. Saunders, 925 Walnut Street, 1898. Toronto: J. A. Carveth & Co.

That any publishing house is able to turn out such perfect work in colored plates as is represented, for instance, in the case of plate 60 B, that of hereditary syphilis as manifested in the teeth of children, says a great deal for the care shown in the books they turn out. The subject of syphilis and venereal diseases is one in which a quick, and at the same time, absolutely correct diagnosis is everything, so that in reading the matter presented by the most recent writers on the subject, illustrations well and correctly produced make a very great difference. The author in this atlas has not attempted to go into the subject of venereal diseases in its entirety, but has wisely dealt with the more common conditions met with, leaving out whatever does not interest the ordinary practitioner. His cases, as given, came almost all from under his own care in his hospital at Vienna.

Will the business manager of Meyers Bros.' *Druggist*, that excellent journal published at St. Louis, Mo., permit us to congratulate him on the showing his department makes every month.

One of the most appreciated of our exchanges is the *Medico-Legal Journal* of New York, edited by Clark Bell, LL.D. Every issue is full of the most interesting material, and shows work to no end on the part of the editor. There is no practitioner who takes any interest in medico-legal work who can afford to be without this publication.

One of the handsomest souvenirs of Toronto we have ever seen is one recently received from Mr. W. S. Carter, the editor of the *Locomotive Fireman's Magazine*, an organization which honored Toronto by its convention last month. It contains well on to half a hundred magnificent half-tones of the principal buildings in Toronto reproduced on coated paper. It is a credit to Editor Carter, and will be, we are sure, appreciated by all recipients.

[PUBLISHERS' DEPARTMENT.]

PURITY IN FLOUR INDISPENSABLE.

BY B. F. ALLEN, M.D.

NONE of the many articles which make up the household food supply is of more vital importance than flour This may seem a self-evident proposition. Yet it happens that it requires to be repeated over and over again, because even thoughtful people seem to forget it. Only the other day an eminent German hygienist addressed a warning on this subject to the housekeepers of the fatherland. "It is strange, indeed," he said, "to find people who are fastidiously careful in other respects willing to accept, without question or examination, almost any flour that is offered to them. Do they realize the danger that lies in such indifference?"

This is the same spirit in which the *American Journal of Health* has for many years addressed its readers. Flour is used in almost every culinary process; it is indispensable in the preparation of food; it forms what may be called a general basis for the dietary. Therefore, it might seem inconceivable that it should receive from so many housekeepers such secondary consideration as it does.

Health cannot be preserved in a household which uses persistently an inferior grade of flour. Housekeepers need to be told what are the best grades in order that they may escape the consequences of mistakes which occur through ignorance. Mistakes caused by wilful carelessness, however, will bring their own punishment. We are constantly examining the various brands on the market and have found none more eminently worthy of confidence than "Ogilvie's Hungarian Patent Flour," offered by W. W. Ogilvie, Montreal, Canada. The method we follow in testing a brand of flour is to secure a sample of it as if it were required simply for household use, to submit this to a chemical analysis, and then to adopt the report made by our own experts. It is impossible for anyone not connected with the staff of this journal to be aware that an examination is being made, and when we publish the facts to the world they form a statement which cannot be contradicted truthfully by anyone. No consideration prevails with this journal excepting the welfare of its readers, nor do we seek to serve any interest whatever but theirs. We endorse "Ogilvie's Hungarian Patent Flour" for the reason that it is nutritious in a high degree on account of its large percentage of gluten; that it is free from an undue percentage of starch, and so does not dispose to indigestion: that it has a distinct uniformity of high quality; that it does not sour; that it produces bread which is both light and white. These are the distinctive characteristics of a first-class flour, and their absence denotes the inferior kind. The stomach will inevitably suffer from

poor flour, which is the dearest in the long run. Sour bread ferments in the stomach, and finally dyspepsia results. Go on eating sour bread and you will become an incurable dyspeptic. And bread, biscuits, piecrust, etc., made from inferior flour are unpalatable as well as injurious. The reinforcement of nervous force—in short, every physical benefit to be derived from good flour may be ensured by the use of "Ogilvie's Hungarian Patent Flour." Remember that there are all kinds and grades of flour, retailed at all sorts of prices. You get what you pay for, and the best kind is the only really economical kind. No more superior flour than "Ogilvie's Hungarian Patent Flour" can be found on the market. It deserves the housekeeper's patronage for the reasons we give. We desire to see it used because it is excellent; not for the sake of its manufacturer, but for that of the large public we seek to serve.

HYPERIDROSIS, BROMIDROSIS—THEIR TREATMENT.

One of the frequent affections, for the relief of which the family practitioner is consulted, is hyperidrosis, though more frequently bromidrosis, especially as applied to the feet. Nothing can be more disagreeable to the sufferer from the latter complaint than a consciousness that his presence is obnoxious owing to this cause. In many instances hyperidrosis is due, not to lack of bathing or personal cleanliness, but is as much a disease as are eczematous eruptions due to gouty or rheumatic diatheses. It is in the warm months of the year that most suffer in this way, though many do all the year round. Sometimes this condition affects only the feet, sometimes the armpits, frequently the region of the genitalia, and in women, especially those who are plethoric, the region of the mammary glands. Though in a large proportion of the cases met with no constitutional cause can be discovered, yet if carefully searched for, it will be noticed that there is a condition of anæmia and faulty innervation, and in young girls even chlorosis present, the correction and relief of which by the ordinary remedies will perform a cure. There are, however, many others where the disease seems to be purely local in origin, and frequently, especially when in the feet, almost uncontrollable. Not only is there a hyperidrosis, but sooner or later the excessive secretion becomes foul and disagreeable, rendering the condition one of bromidrosis. The result of this condition in the pedal extremities, sooner or later, is tender feet, rendering locomotion nothing less than painful. The feet swell, the ankles even becoming puffy. In spite of the sufferer wearing fine, pure woollen socks or stockings the condition persists, very frequently to such an extent as to cause the eruption of small blisters or vesicles, which on breaking cause the formation of numerous little ulcers and lay up the person in bed frequently for quite a time. The question that comes to the mind of the physician

in treating so chronic a case is what form of treatment had better be adopted. He, we will say, has tried very frequent salt bathing, the use of dusting powders, astringent lotions, even the application of Hebra's diachylon ointment, with any number of tonics administered internally, even going so far as ordering belladonna in some form to check the excessive sweating, and then has been given little or no relief. By turning to the question of the footwear the physician will find a means of giving great relief to his patient. There is no doubt that many boots are so badly made as to cause local affections of this kind. A system of ventilated shoes has recently been introduced into Canada and to which foot-gear the name of "Respira" has been applied. These shoes are so made that there is a perfect current of air circulating all round the feet all the time. The idea is certainly a capital one. Every time the person walks, the pressure of the foot on an insole of interspaced pure rubber causes a suction process and draws in air through an opening which is in the heel, and which opening can be closed so as to be perfectly air and water tight in cold or wet weather. As soon as the air is drawn in, it is pressed up through a series of holes in the inner sole and reaches the foot itself. In that way, perfect ventilation is given. It will be found that by the use of these shoes the wearer will no longer suffer from so distressing a malady, but on the other hand will get comfort and ease. To the medical profession the introduction by The Kennedy Co., whose headquarters for Toronto will be found in the Manning Arcade, King Street West, of such an article will prove a boon, and also a means of giving relief to a class of patients whose cases in the past have been in many instances difficult to treat.

WHOLESOME FOOD PRODUCTS.

The modern tendency toward cheapness of price is primarily answerable for much of the adulteration which is so prevalent in every line of manufacture. The popular demand must be supplied, and to meet the existing conditions of things, articles of questionable merit are thrown upon the markets. In no other direction is this deterioration of wares working greater havoc than in the line of food products, as the impurities in such goods not only impose upon the purse of the consumer, but even strike at the very foundation of life itself. It is therefore the duty of every physician to inform himself concerning the purity of food products, as it is the duty of health journals to point out the dangers incident to the use of foods which may be impure and unwholesome, as well as to indicate purity and wholesomeness where such desirable qualities have demonstrated their existence. Hygienic publications in particular are relied upon to furnish such information to their patrons who look to such sources for guidance upon all matters relating to the well-being of themselves and their households.

Whilst the *American Journal of Health* has never hesitated to expose adulterations in food, it has always been desirous to pay tribute to pure food products wherever found, and whilst aiding its readers to escape the dangers of the one, it is ever ready to indicate where the purest and best in every line may be obtained. In keeping with such principles it is a pleasure to call attention to "Shredded Whole Wheat Biscuit," whith has been subjected to the most searching chemical tests with a result of demonstrating its intrinsic value and absolute freedom from all deleterious admixtures.

The samples experimented on were obtained in open market, hence were identical in quality with the goods sold the general consumer, hence every purchaser of this food product may rest assured that in taking such into his family he is insuring the household against the dangers incident to questionable or contaminated articles of food.

In addition to our analytical examination of this food product, we have caused to be instituted a searching investigation of the manufacturers, the Cereal Machine Co., Worcester, Mass., and the report made by editorial representatives assigned to such duty indicates that a more responsible and trustworthy establishment does not exist. Through the operation of our Secret Enquiry Bureau, we have ascertained that the greatest care and cleanliness prevails in the process of manufacturing their several lines of goods, which accounts for the high qualities of their products. Taken altogether, we have never come upon a purer or more wholesome and nutritious article of food, and in making it a subject of especial commendation we do so feeling that we are benefiting every housekeeper who reads these lines.

O. H. Tyler, M.D.

Dr. W. P. Caven and Mr. Lloyd Wood have just returned from a trip South.

Dr. T. S. Webster is moving into a very handsome new house on Spadina Avenue, just above Knox College.

Dr. J. McMaster has moved from 76 to 114 McCaul Street, the residence of Dr. Leitch previous to his moving to Spadina Ave.

Dr. G. S. Ryerson and Dr. G. H. Burnham, of Toronto, attended the meeting at Buffalo, N.Y., of the American Electro-Therapeutic Association last month.

Dr. J. J. Cassidy attended the meeting of The Executive American Health Officers' Association at Ottawa last week, and took an active part in the work there.

Dr. C. R. Dickson, of Sherbourne Street, is to be congratulated upon the result of his year's work as President of the American Electro-Therapeutic Association, which met in Buffalo, N.Y., two weeks ago. Owing to the doctor's efforts the meeting was a distinct success. We hope to give a digest of the meeting next issue.

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Original Contributions.

SPORADIC CRETINISM IN ONTARIO.*

BY ALEXANDER MACPHEDRAN, M.B.

Professor of Medicine and Clinical Medicine in the University of Toronto, etc.

No disease or deformity causes more distress to parents than the grave forms of cretinism. While the subjects of it are carefully and lovingly cared for they are also jealously shielded from the public gaze, in the consciousness that a blight has fallen upon them. They may present a picture that is scarcely human; the mental condition is affected equally with the physical. However, of all the triumphs of medicine few equal and none surpass the brilliant results obtained in the treatment of cretinism. Had vivisection done nothing more for humanity than place in our hands the means to restore so many of these unfortunate creatures to vigor of mind and body, there would have been ample justification for all the sacrifice of animal life that has been made for the advancement of science.

The earlier the treatment is begun the better the prospect for a good recovery. It is important, therefore, that early diagnosis be made. The effects of the administration of thyroid are well illustrated in Dr. Stone's case (Case 5, Figs. 5 and 6). There is a loss of body weight due to disappearance of the myxœdematous deposit and of fat, the various parts of the body become more shapely, the belly and navel less prominent, the lips thinner and mouth less open, the tongue smaller and retracted into the mouth, there is great rapidity of growth, affecting especially the legs, so that the

* Read at the meeting of the Ontario Medical Association held at Toronto, June, 1898.

middle of the body is shifted from the umbilicus to the pubes, the skin becomes smooth and softer, and losing its dirty hue takes on a ruddy appearance, the hair grows soft and abundant, the appearance of the child becomes alert and active, the teeth develop rapidly, and the general appearance becomes intelligent.

The mental condition improves, though less rapidly than the physical. On account of the disappearance of the subcutaneous deposit the face becomes more comely and the muscles have more play, so that the apparent is greater than the real improvement in intelligence. The younger the child the greater the mental improvement usually, yet even up to thirty years of age the mental condition may improve very much.

Fig. 1.

Fig. 2.

It seems immaterial which preparation of thyroid is given. The fresh gland, the desiccated gland, and even the colloid substance have been found equally efficacious. It is important that the preparation used be free from decomposition products, as these probably cause the unpleasant effects frequently met with from its administration. The dose should be carefully graduated according to the age of the child. We may begin with half a grain of the desiccated gland two or three times a day, and, if no unpleasant effects result, increase the dose in a week or two to one grain, to be increased still further later if improvement be not satisfactory. If unpleasant effects result, such as a rapid pulse, a feeling of depression or fever, the dose should be lessened, or a fresh preparation tried. The necessity for continuance of adminis-

tration of thyroid is uncertain. Dr. Bury (*British Medical Journal*, Sept. 12, 1896, page 621) reported the case of a babe one year old that had "ceased to get on, became flabby, fat, lost his vivacity, and had begun to show protuberant abdomen, a lax skin and other cretinoid appearances." Small doses of thyroid speedily "picked him up," and treatment was discontinued at the end of six months without return of symptoms. In more marked cases it will probably be necessary to give thyroid once or twice a week to maintain a good condition. It may be that intermissions of a few weeks from time to time may be allowed without ill effects.

The diagnosis of cretinism in well-marked cases offers no difficulties. As early treatment results practically in perfect recovery, and the later that treatment is undertaken the less the effect produced, especially on the mental condition, it is of the utmost importance that an early diagnosis be made. Some cases have been supposed to be chronic Bright's disease. Other forms of idiocy, especially the so-called Mongol type, infantilism and fœtal rickets, have to be excluded. There may be difficulty in distinguishing in some cases the Mongol type of idiots from cretins.

Cretinism may be due to congenital absence of the thyroid gland, to atrophy of the gland following constitutional diseases, or to degeneration caused by goitre. In cases of congenital absence of the gland the symptoms begin in infancy and may show themselves at birth (Victor Horsley, *British Medical Journal*, Sept. 12, 1896, page 620). In cases due to atrophy and degeneration, the disease begins later in life, and often follows an acute disease, such as scarlatina, measles, etc.

While this disease is not prevalent in Ontario, a sufficient number of these unfortunate cases occur to merit the careful attention of the profession. So far, I have been able to secure reports of seventeen cases, and a few others are known to exist of which reports have not yet been obtained. Doubtless there are many other cases of which I have not as yet heard. Five years ago Osler could find only eleven cases in America, and last year, the profession having learned to recognize the condition better, he was able to report upon forty-nine other cases. The fact that in a collective investigation extending over less than two months I have been able to find seventeen cases in this Province indicates a wide recognition of the disease.

The following are brief notes of these cases:

1. Dr. R. M. Calder's case, Petrolia.—Charlie H., aged fifteen years. Height 3 feet 4 inches. (Fig. 1.) Appeared well until ten months old when he had scarlet fever. After this his growth seemed arrested. He did not walk until two years old; then he became subject to severe attacks of colic until the age of twelve years. He has a very large abdomen and walks with a waddling gait; mentally he is infantile. He would like to be large like his brother, and wonders if his father would give fifty cents to have him made that large. His face is usually grave.

Case 2.—G. P., aged nine years (Fig. 2). A marked case of infantile myxœdema. Height 26 inches, measurement of head 21 inches, of chest 22½ inches, of abdomen 23 inches. He is unable to stand without support. He was healthy as a babe. From the age of eight months it was observed that he did not develop well either in body or mind. He is now of a very low grade of intelligence; he is not able to distinguish objects or one person from another. The myxœdematous condition is very marked, the lips being very thick, the tongue large and protruding, the nose flat and broad, the eyes very wide apart, the belly prominent and the umbilicus protruding. The vaso-motor tone is very low so that the mucous and cutaneous surfaces are livid, especially if cold. No

Fig. 3.

Fig. 4.

thyroid is to be felt. He cannot speak, but manifests satisfaction by a grunt. He is not difficult to care for. The skin is harsh and dry, especially on the body. He wears a babe's No. 2 shoe. He has cut no teeth—three sharp points of teeth can be felt in the lower jaw. He has not been treated.

3. Dr. Jerrold Ball's two cases, Toronto.—1, William T., aged thirty years (Fig. 3). Height 3 feet 9½ inches, circumference of he head 22 inches, chest measurement 31 inches, abdomen 33 inches, weight 87 pounds. The spine is markedly curved, backwards in the upper dorsal region and forwards in the lumbar, thus adding to the prominence of the large belly. As an infant he was dropsical and remained so for years. He walked and talked at 21 months. His legs are much bowed. His lips are very thick

and the lower one drops low, but can be brought up into contact with the upper one; the tongue is moderately thickened. He has all but six of his permanent teeth, but some of them are barely through the gums and all are poorly developed; he has still a few of his temporary incisor teeth. The hair is scanty and coarse; there are a few hairs on the pubes; he has no beard. The circulation is poor. The mucous membrane of the mouth is dark and turgid. No thyroid gland can be felt; the appetite is fair and the bowels regular. He is intelligent, understands what is said to him and answers well, but the voice is harsh and guttural and articulation indistinct. He remembers circumstances that have occurred, but cannot acquire abstract knowledge. He is unable to learn to read.

FIG. 5.

FIG. 6.

4. 2, Lilly T., aged seventeen years, sister of William T. (Fig. 4). Height 2 feet 8 inches, circumference of head $20\frac{3}{5}$ inches, anterior fontanelle slightly open, chest 26 inches, abdomen 28 inches. Similar kyphosis to that of the brother, but less marked. She is able to walk about unassisted. The tongue is larger, though not protruded, and the lips thicker than in the brother's case. Her condition is similar but more marked in other respects. She still has many of the temporary teeth. There is a cyst 2 inches in diameter of the right lobe of the thyroid and the left lobe is firm as if fibrosed. The bowels require an enema daily.

The parents of the two are first cousins. The mother is healthy, but not robust; the father is strong. One sister, well developed, died at the age of eighteen of pulmonary tuberculosis.

5. Dr. John R. Stone's case, Parry Sound.—Male, aged twelve years. When treatment was begun he had grown practically nothing for eight years and seemed to become actually less intelligent. He has been treated with thyroid (desiccated) for eleven months. Before treatment his height was 2 feet 9¼ inches. (Fig. 5.) Now it is 3 feet 2⅝ inches. (Fig. 6.) Before treatment he would sit all day taking little notice of anything; was able to say few words and these but indistinctly. He could walk only with the aid of chairs. Now he runs about and takes as much interest in games as other children; talks a great deal and understands almost everything that is told him. His hair was scant, coarse and stunted, and the scalp covered with thick scurf; now the scalp is clean, the hair is soft and abundant. The neck, formerly short and thick, has become shapely. The joints of the hands and feet were ill-defined; they are now quite shapely. His weight was 42 pounds when treatment was begun. It gradually fell to 35½ pounds, and then began to increase, until now it is 43 pounds. His legs have become much straightened. His appetite was poor and capricious; his bowels were obstinately constipated. Now his appetite is good and bowels normal. A peculiar circumstance in his case was the fact he had the children's disease mildly and for a very short time.

Fig. 7.

6. Dr. A. E. Harvey's case, Wyoming.—(Fig. 7.) M. E. H., female, aged thirty-four years, but looks much older. An aunt and a cousin of her mother were dwarf, and resemble closely this case. M. is goitrous. She cut her first teeth when seven years old, and began to menstruate at age of twenty years. Her intellect is very infantile. She sits with feet drawn up under her most of the time.

7. Dr. A. Gordon Hodgin's case, Petrolia.—M. H., aged twenty-seven years (Fig. 8.) Was a healthy child until three years old although not walking much. Had scarlatina and showed signs of cretinism after recovery. She is 3 feet in height, the chest is 21 inches and the abdomen 29 inches. The arms and legs are very short and thick. The head is large, the face full, the neck short and thick. The thyroid gland can be felt. The lips are thick, the tongue large but not protruded usually. The gums are swollen and the teeth much decayed. The bowels are always constipated. She can say a few words. She is easily irritated and cries like an infant.

8. Dr. T. F. MacMahon's case, Toronto.—Reta L., aged thirteen years. Height 34 inches. Has grown 3 inches in four years. Marked kyphosis for past four years. Abdomen prominent Cheeks look heavy and face old. Tongue not protruded. Hair normal. Speech very imperfect but she can be understood by her friends. Fontanelles did not close until seventh year. Her skin is not puffy-looking or harsh. Lips are thick and heavy but mouth is not kept open. Walks with the support of a chair. No trace of thyroid gland can be found. Extremely quiet and inactive but not imbecile. Good-natured and happy. Cannot teach her the alphabet. Memory good for facts, faces, etc. Temporary teeth still present and but two permanent lower central incisors have as yet appeared. Apparently a normal baby at birth and was fed at breast. Her father, two years before her birth, met with an accident which caused complete paralysis for six weeks. He then slowly recovered, so much so as to resume work on a farm. Family history excellent on both sides. Is clean in her habits and affectionate. Has been taking thyroid tablets for past two months and is much improved in appetite and I think looks brighter.

Fig. 8.

9. Dr. McKay's case, Ingersoll.—Joseph B., aged twenty-five years; a typical cretin. Height 55 inches, weight 70 pounds, circumference of head 23 inches, of thorax 25 inches. He is not able to walk without some support. He is easily offended. His memory for objects poor, but remembers faces and names well. The bowels are obstinately constipated, never moving without a cathartic or an enema. Appetite poor. His father died of some form of pulmonary disease. He was passionately fond of playing the violin. The boy is equally fond of it but cannot play it, although holding it properly and knows when it is correctly played. He looks like a boy of ten years, and is about as intelligent as a boy of two years. He has not been treated on account of objection by the family.

The following seven cases are inmates of the Asylum for Idiots at Orillia, and for the notes of them I am indebted to Dr. William Laidlaw, Assistant Superintendent:

Case 10.—Lizzie F., aged forty-one. Her mother was epileptic. Two sisters are feeble-minded and one brother idiotic. Her height is 38 inches, weight 56 pounds. The chest measures 33½ inches, the abdomen 32 inches. She is quiet and easily amused. Cannot walk. Cannot speak but understands some things. The head is large and the neck thick. The hair is coarse and thin. The nose

flat, the eyes far apart. The mouth is large, the lips thick, and the tongue large, rough and protruding.

CASE 11.—Mary J., aged forty-three years. Height 53 inches, chest measures 32 inches, the abdomen 35 inches, the head is 22 inches in circumference. She walks with a waddling gait. Cannot speak but understands a little. She is bright in the summer but dull and apathetic in the winter.

CASE 12.—E. B. L., male, aged nineteen years. Height 49½ inches, chest measurement 28 inches, abdomen 29 inches, head 21 inches. Speaks a little with the dumb alphabet. He is quick to understand what is said to him. His hands and feet are thick, small and always bluish from poor circulation. He was treated with thyroid grains five per day for three months without improvement. It was discontinued as he refused to take it longer.

CASE 13.—Janet L. J., aged twenty-four years. Height 47½ inches, chest measurement 32, and abdomen 33 inches. Head and face are smaller and more shapely than the foregoing cases. The hands and feet are short and thick. The body is thick, and skin dry and cold. She can walk with a side-to-side motion. She says a few words. Her mental condition is very poor.

CASE 14.—Vera M. L., female, aged eight years. Height 38 inches, chest measurement 25½ inches, and abdomen 29 inches. The hair is dry and skin rough. The hands and feet are thick. She walks with a swinging gait. The tongue large and the teeth poor. She cannot speak but understands fairly. She is making fair progress in the kindergarten class. Has been treated with thyroid with considerable improvement. She grew one-half inch in height and became much brighter.

CASE 15.—Fanny E. V., aged twenty-nine years. Height 53 inches, chest measurement 31½ inches, abdomen 30½ inches, and head 22 inches. Very slow in all her movements. She walks with a shuffling gait. She talks a little and comprehends fairly well what is said to her. Tongue is large; the teeth poor. The skin is hard and the hair coarse and dry.

CASE 16.—Charles H., aged forty-three years. Height 47 inches, chest measurement 26½ inches, abdomen 29 inches. Hands and feet thick and mishapen, and bluish. The skin is rough and harsh; the hair scanty and dry. He talks fairly well and imitates everybody.

17. Dr. F. N. G. Starr's case, Toronto.—L. M., male, aged ten years. Height 41½ inches, chest measurement 22 inches, umbilicus 24 inches. Head 21 inches in circumference; flat in upper surface and prominent in parietal regions. Face broad, especially wide across the nose. Slow and deliberate in his movements. The thyroid appears to be absent. The abdomen is prominent. The skin dry and harsh; he sweats but rarely. Constipation constantly present except after medication. The voice is deep, and his remarks are very deliberate. The mental capacity is fairly good. He developed as well as most children till the age of four. Since then he has not grown any.

EMPYEMA, OPERATION, RECOVERY.

BY B. R. HOPKINS, M.D.

On December 2nd, 1897, I was called to see Georgie G., aged seven and a half years. His mother told me that he had been out playing football with a number of boys two days before, and she thought, became overheated, as the next day (the day previous to my first visit) he had complained of a slight pain in his chest "under the left arm" and had coughed a little during the night. He had also said to his mother that he had felt chilly during that afternoon, and that the pain was getting worse. When I reached the house, I found the little fellow lying upon his left side, with a pillow under that side of the chest, and every time he had coughed it made him cry with pain. I found his temperature $101\frac{2}{5}$ and his pulse quite rapid. His skin was moist, tongue furred, breath disagreeable, and during my call he vomited some nasty green bilious fluid. On examination of the chest I made out a distinct pleuritic rub about the junction of the middle and lower thirds of the left lung, though it was a difficult matter to get the boy to take a sufficiently full inspiration to make out the pleuritic rub, except occasionally. I heard it most distinctly by turning the patient over and placing the stethoscope just below the angle of the scapula. As it was quite evident that there was an incipient pleurisy, I instructed the mother how to apply a 2 x 2 canthos plaster to a certain spot as marked by me, and I prescribed a mixture containing two minims to the dose of B.P. tincture of aconite, the same to be administered every two hours for four doses, and then every fou rhours.

On arriving next morning, I found that the nurse, who had since come, could report that the little chap was somewhat easier. The plaster had blistered freely, and I let out over a drachm of serous fluid, dressing with lanoline on lint. The skin was quite moist from the diaphoretic effect of the aconite, and on physical examination I found that, though the pleuritic rub was still there, it was to be heard less frequently. The temperature was $100\frac{4}{5}$, and pulse 108. I ordered a full dose of magnesia sulph. to be given, which produced a good watery stool in about four hours.

For several days the temperature kept hovering in the region of 101, and showed very little tendency to defervesce. The pain in the chest disappeared in another day or two, but notwithstanding the use of the counter irritant, the disease advanced into the second stage in spite of all my efforts. On the morning of the fifth day, the percussion note was almost flat and respiratory movement on that side very much decreased, and consequently increased on the right. The pleural cavity became rapidly filled up and the cough increasing in severity, I prescribed an expectorant mixture of

senega, ammonia, squills, and codeia, and applied every four hours linseed meal poultices to the left chest. The temperature on the ninth day was as low as it had been, sinking to $99\frac{4}{5}$. I was in hopes absorption would take place gradually and convalescence ensue in the regular way, but I was doomed to disappointment.

On the evening of the sixteenth day I was summoned to the house in a hurry and found my little patient just recovering from a severe chill, which was followed by profuse sweating. The temperature (as a hot-headed Irishman would say, "Bad luck to it") had risen to $104\frac{1}{5}$ and the pulse very rapid and thready. Nurse told me that he had been quite comfortable all day, till three o'clock, when he vomited all the nourishment he had taken, and which was accompanied by a great deal of straining. The chill had lasted nearly half an hour. I administered 3 grs. of quinine and ordered $\frac{1}{4}$ gr. of calomel to be given in an hour, followed by another $\frac{1}{8}$ gr. in three hours. There was a free bilious stool shortly after. Next morning I found the temperature still very high, $103\frac{1}{5}$, and a nasty-looking flush on the face. The nurse reported that there had been another chill in the night, only less severe, and the little chap had been very restless from coughing a good deal. Satisfied that the fluid in the pleura had become purulent, I, after applying a spray of ethyl chloride to the skin just below the angle of the scapula, inserted into the pleural cavity a trochar, when out flowed an unhealthy-looking semi-watery pus.

Seeing that there was nothing for it but operation, with assistance next day, I chloroformed Georgie, and after thoroughly aspirating I cut into the pleural cavity between the eighth and ninth ribs. The moment I made the incision a large quantity of unhealthy pus escaped. I allowed it to get free exit by inserting into the wound an ordinary pair of forceps and holding them open. With what pus I got out by the aspirator and what escaped by the wound, I am satisfied that we removed between fifty and sixty ounces from that boy's pleural cavity. I did not think it necessary to excise a piece of rib, so simply inserted a full-sized drainage tube and applied boracic dressings.

For several days after, in spite of the fact that there was free drainage, the temperature still kept in the region of $100\frac{4}{5}$ and 101. I stopped the expectorant mixture and ordered syrup ferri iodide in drachm doses, and small doses of stimulants four times a day, with as a diet rich soup (strained), milk and eggs. I removed the dressings every morning and washed out the drainage tube, taking care that the latter did not become in any way occluded. The temperature still kept decidedly septic in character, up every night and down in the morning. I then prescribed viskolein powder in four-grain doses in water every four hours. That was kept up for several days, being administered in between each dose of the syrup of the iodide of iron.

On the sixth day after that, the temperature rose less at night, and in the beginning of the following week it came down to

99⅕. The discharge from the wound became less and less in quantity and granulation progressed, till I had, in the ordinary progress of the case, to shorten the drainage tube considerably. The temperature did not rise again over 100. I kept up the powders of viskolein for ten days, when the temperature had become normal. I put the boy then on cod liver oil four times a day. I was soon able to add to his diet a few oysters, with somatose, and then sent him a short way out into the country for six weeks. He soon began to put on flesh again and lose his emaciated appearance, the cough becoming very little trouble to him. What was the cause of the continued high temperature after draining the pleura I cannot say. Every antiseptic precaution was taken, though I did not follow the advice of the surgeon who assisted me and wash out with a mild antiseptic solution the whole pleural cavity, being content to let the pus escape through the wound and then look after free drainage. Perhaps a pocket of the pus lower down than my opening did not become freely emptied, though as to that I cannot answer. The viskolein had a very pleasing and effective antipyretic action, carrying out in this case just what I had read of it, by, I fancy, inoculating the blood with sufficient antiseptic to render the blood an infertile field for the further propagation of disease germs.

My patient rapidly progressed and the tube was removed in fourteen and a half weeks from the date of the operation. His chest on the affected side has now quite a resonant note, the respiratory movements being almost as complete on one as on the other side. Cough is all gone, and during the last four weeks little Georgie gained twenty-one pounds in weight. He is, in spite of all, once again playing football.

PULMONARY TUBERCULOSIS.

BY JOHN HUNTER, M.D.

By way of preface the following case is cited to help accentuate the necessity of reiterating everything that can be said about this disease in order to attract, if possible, such an amount of attention to it as will in some measure spur us up to get rid of our "*laisser-faire* methods of chest examination:

A young man recently consulted a physician, said to be held in repute by his brethren, and was told that there was nothing serious —simply suffering from effects of a cold, and would soon be well. He was not satisfied, consulted others who found extensive destruction of lung tissue, bacilli in sputum—in brief, a far advanced and rapidly progressing case of pulmonary tuberculosis. There can be no two opinions as to the demerits of the first diagnosis. It dis-

graced the physician, discredited the profession, injured the patient and permitted wide-spread infection.

It is absolutely true that the difficulties involved in making a correct diagnosis in many cases of incipient tuberculosis, baffle alike the highest skill and most assiduous efforts. However, after making full allowance for all these, the fact remains to the discredit of physicians, and as a menace to public health, that altogether too many cases like the above one pass undetected either through culpable ignorance, or more probably through careless and inefficient methods of examination. Why are ignorance and carelessness more permissible on the part of physicians than of surgeons? The latter have to suffer for their sins of omission, whilst the former get off on an apology of being overworked, or by claiming the inalienable right to differ from their confreres.

Etiology.

The etiology or cause of tuberculosis was definitely settled in 1882, when Koch by a masterly effort proved the inseparable relationship between a specific bacillus and tuberculosis; in other words, without the former under no condition can we have the latter.

Accepting Koch's theory as true an intensely interesting problem arises out of it, as to what constitutes immunity and what vulnerability. It is a fact that a large proportion of people are immune against all ordinary sources of infection, *e.g.*, widows remain healthy although having lived in most intimate relationship with, borne children to, and nursed their husbands through long periods of illness from tubercular trouble. Others again seem so susceptible as to acquire the disease from very slight exposure, hence the wide interval between the opinions of equally competent observers as to the degree of contagiousnes. Some claim that it is almost *nil*, others that it is as well marked, as, for instance, in diphtheria.

The following incidents, amongst others, may be assigned some value in establishing or maintaining immunity: Healthy and vigorous ancestry, pure air, an abundant supply of wholesome food, active out-door life, sanitary homes, invigorating climatic influences, well-regulated methods of living, *e.g.*, avoidance of too much worry, or of alcoholic, or venereal excesses.

An ominously long list of so-called predisposing causes has been handed down from "sire to son," all through the centuries, and anon augmenting with almost every new increment to civilization. Ancestral delinquencies and defects, impure air, poverty, overcrowding, unsanitary surroundings, unhealthy avocations, debilitating climatic influences, excesses of all kinds and degrees, sedentary indoor life and especially all diseases that have a tendency to impair the functions or irritate the tissues of any portion of the respiratory tract, *e.g.*, influenza, pleurisy, pneumonia, bronchitis, etc., in brief, anything and everything that militated against the health of progenitors, or interferes with the well-being of their progeny, may be incorporated in the list of predisposing causes.

However, a critical analysis of all these beneficent or maleficent incidents, conditions or influences only warrants us in stating that fewer persons under the former and more under the latter acquire tuberculosis. We are yet in a wilderness of speculation in regard to "predisposing causes," and will remain in it until we are able to decide what elements are necessary in our "make-up" to constitute immunity, and what is wanting that incurs vulnerability. That the dividing line between these two conditions is, in many cases, very narrow seems evident from the apparently slight influences that turn the scale either way.

Pathology and Morbid Anatomy.

The specific bacillus acquired its name from being rod-shaped. The rods may be straight or curved, and appear singly, in twos, or groups. The most suitable temperature range for their growth is between 90° and 105°, and they require the presence of oxygen. They stain readily, and when numerous may be recognized by the aid of a microscope with a magnifying power of 200 or 300, but if few in number a condenser and oil-immersion lens may be necessary. They can exist outside of the body in dust, dried sputum, milk or meat, hence the many sources of infection.

The invasion of the pulmonary tissues by the bacilli may take place in three ways, through the air, blood or lymphatic glands, and is followed by the production of minute bodies called tubercles. These are formed chiefly by three varieties of cells—epitheloid cells, giant cells and leucocytes. Bacilli may be found incorporated in the tubercles. It is claimed by some pathologists that there is a more or less persistent struggle for the mastery between the bacilli and certain cells. Until recently this phagocytosic action of these cells was supposed to be the only source of defence against attacks of the bacilli, but now a large amount of bactericidal and antitoxic action is assigned to the fluids of the body, *e.g.*, serum, gastric juice, saliva, etc

Tubercles, isolated or in nodules, usually undergo a softening process, known as caseation. However, other changes may take place, such as the formation of fibroid tissue or the deposit of mineral salts forming calcareous masses. The caseous mass may open into a bronchial tube, and thus give rise to a cavity, or sufficient inflammatory action may take place around the circumference of the nodule to imitate the formation of a fibrous capsule, which may be capable of inhibiting any further action of the bacilli. This latter condition probably accounts for the delusion that many physicians entertain, viz., that if a patient recover from a suspiciously protracted attack of lung trouble, it could not have been of a tubercular character. However, these capsules may break down at any time and allow their virulent contents to escape and produce reinfection. Ten or twenty years, or even half a century or more of good health may have intervened between the attack produced by the primary invasion of the bacilli and the one resulting from auto-infection.

Few surprises are more common in post-mortem examinations than the finding of tubercular foci in subjects who had never shown, during life, any evidence of the disease.

Clinically, three varieties may be pretty clearly differentiated: The *miliary* with the tubercles widely disseminated; the *caseous* in which the contents of the individual tubercles, or larger masses, change into caseous or purulent matter, and the *fibroid* where consolidation from tissue formation slowly takes place.

The apex of the lung, a little below and posteriorly, is the most frequent site of the initial lesion. Many reasons are assigned for this, such as more fixidity, less functional activity, wider tubes, feebler circulation, more moisture, etc. The apex of lower lobe, the septum between the lobes, and the apex of opposite lung, is the most usual order. The amount of lung tissue involved may be limited or very extensive.

The blood vessels traversing the tubercular nodules may present aneurysmal dilatation; a rupture of one or more of these gives rise to attacks of hæmoptysis.

The most frequent sequelæ found are, collapsed air cells or emphysematous patches from tubercle obstructing bronchi, empyema through escape of purulent matter from a cavity into pleura, perforations into trachea, ulceration of intestines, peritonitis, amyloid degeneration of liver, spleen, kidneys, stomach and intestines, involvement of lymphatic, bronchial and mesenteric glands, meninges and brain, circulatory and generative organs.

THE PREVENTION OF TUBERCULOSIS.*

BY W. J. WILSON, M.D.

Mr. President and Gentlemen,—The prevention of tuberculosis has been selected for your consideration this evening, not that the writer of the paper has anything new to present, but that the opinion of the society may be expressed on this very important subject. We all know how fatal this disease is, especially in congested districts, and how futile have been our efforts at cure in pulmonary cases that are at all well advanced.

We would note, in passing, how our ideas of cure have been modified since we have known the disease better and have detected it at an earlier stage than formerly we were able to do, thanks to an improved microscopical technique. We would also note how the word "scrofula" has been gradually dropped from our vocabulary and "tubercular" substituted. What we formerly called scrofulous glands or joints, we now call tubercular. The germ finds entrance to the system generally through the digestive tract,

* Read at Toronto Medical Society, October 13th, 1898.

in our food, or through the respiratory in the form of dust—milk and meat from diseased animals being the most prolific sources of contagion by the digestive tract, while dried sputum or floating particles expelled during violent acts of coughing cause the respiratory form. Each tubercular animal or man forms a source of infection.

It is not likely that meat will convey the disease unless the part eaten is actually tubercular. This, of course, might happen; but it is not likely that meat with tubercular deposits in it would be used; and again, if well cooked, the germ would be destroyed. However this may be, it is desirable that there should be better facilities for meat inspection. The small slaughter-houses should be closed, and all animals slaughtered at central points where inspection could be made efficient.

In the case of dairies, it is more difficult. Frequent inspections should be made and the tuberculin test used. It is especially difficult to make this inspection perfect, as farmers frequently change their cows, and when their milk is running short, get it supplemented from any neighbor who may have some to spare. Dairymen object to the cost of the tuberculin test, but if no milk were allowed for sale in a city where the test had not been used and inspectors appointed to look sharply after the matter, there would soon be an adjustment of affairs in the way of supply and price that would be satisfactory to all concerned. If it should be found here that over 50 per cent. of our cattle are affected, as is stated to be the case in England, the problem will prove a difficult one for a long time from the great loss the farmer would sustain; but if Government would make it compulsory to furnish a veterinary's certificate with each sale of a cow, stating that she had been subjected to the tuberculin test and was free from taint, a premium would be put on sound cattle, and the disease would in time be stamped out.

A city might be protected from diseased milk by establishing stations in which all milk brought into the corporation should be subjected to a thorough process of sterilization, and then handed over to the dealers for delivery. Money spent in preventing a disease is a better civic investment than the building of hospitals for its cure.

More attention should be paid to the housing and care of cattle. They are generally kept in low, dark stables, where the air space is far below what is necessary for the cows' health, and just in the most favorable condititions for inducing tuberculosis. If the farming community were educated on these lines, they would soon begin to make improvements. Matters of this kind could well be taught in our public schools as part of the hygiene.

Protection from the infected human subject is rather difficult to enforce, but a process of education is steadily going on which will soon bear fruit, and contagion from this source will be greatly

lessened. Public sentiment must be educated up to the point necessary to stop the spitting habit on our streets and in public places. A patient well advanced in consumption is said to expectorate from four to five billions of bacilli in twenty-four hours. The bacilli are scattered all over our streets, and among the poorer classes, especially around their houses and yards, and even on the floors of their houses. This sputum dries, and is inhaled as dust where it lodges on the tonsil or adenoid tissues of the throat, and travelling from thence to the cervical glands, or it is taken into the bronchi and finds a lodgment there, especially if the patient be debilitated from previous disease, or has a bronchitis, or a not quite cleared up pneumonia. Heredity comes in here by furnishing a good culture ground for the bacilli. Patients with this tendency should, where possible, be placed under conditions calculated to increase their powers of resistance and at the same time remove them from sources of infection.

Every case of pulmonary tuberculosis should be reported to the health boards as soon as the bacilli can be discovered in the sputum. This could be done without hardship to the parties concerned. Isolation should not be thought of, but on notification it should be the duty of the health officer to supply the patient and his friends with all the information necessary to protect the family from contagion. This information would cover such subjects as ventilation, condition of sleeping apartments and care of sputum.

After death of patient, the health authorities should look after the disinfection and cleaning of patient's late residence. This is rather an important matter that at present is entirely neglected. A patient dies, after a long illness, where billions of bacilli have been coughed up daily. No systematic or sufficient cleaning is practised, and other members of the family contract the disease after the patient is gone, if they have been fortunate enough to escape it thus long. It has long been noted that where one patient has had consumption in a house, sooner or later another case will follow.

The germ lodges on ledges and in dark corners, and is even said to grow on the paste of wall-paper. It is then, after a time, disturbed and inhaled by a susceptible subject, and tuberculosis results. A case has been reported to the writer where a family moved into a house, and in a few months the lady of the house was discovered to be tubercular. It was then found that eight others had contracted consumption in this house.

The tubercle bacilli is very hard to kill by disinfectants, but fortunately cannot live in direct sunlight for more than a few hours. This fact suggests that our municipal authorities should, at the time a building permit is asked, have the power and employ a competent person to confer with the builder and secure the best possible arrangements for heating, ventilating and lighting of the proposed structure.

THE PSYCHOLOGY OF NERVOUS DISORDERS, PECULIAR TO THE SEX.

BY J. J. MORRISSEY, A.M., M.D.

Professor Practice N. Y. School of Clinical Medicine, Visiting Physician to St. Jo-eph's Hospital.

AMONG the many valuable papers contributed to the different sections of the last meeting of the American Medical Association, there were some whose excellence must claim attention on account of their general interest, as well as the vast amount of technical information furnished. Notably among these are to be placed the papers which discussed the so-called relationship existing between the ailments peculiar to the sex and the development of nervous disorders.

There has been a feeling abroad among the profession that the operative procedures, whose object in many instances was to unsex the female, in order that some obscure complaint of a nervous character, far removed from the seat of the original disorder, might be alleviated, were entirely unwarranted. This sentiment found due expression in the utterances of men eminent in their profession, and yet sufficiently conservative to recognize that much might be done to alleviate conditions without resorting to drastic measures.

When the general practitioner failed to combine and transpose the various symptoms presented by his patient into a distinct disease entity, he sent her to the specialist, and it was not a difficult matter for the latter to find a cervical erosion, a perineal tear, or other solution of continuity in the genital tract that would account for the diversity of symptoms. An operation is performed, and frequently with no distinct advantage, except the profound psychical impression which changed the current of thought and directed the woman's mind, so long habituated to disease impressions, to other channels. In the minds of many specialists in women's diseases the orbit of her life revolves about her uterus. While this may be true in part, it cannot be affirmed as a whole. As Dr. Peterson well said in his able, but all too brief, paper, "Were sex determined anatomically by the pelvic organs alone, there might be some excuse for giving them that prominence in pathology for which certain gynæcologists, especially those afflicted with *manie opératoire*, contend. But femininity does not reside solely in the pelvic organs; it pervades the entire organism of woman, her bones, muscles, breasts, viscera and nervous system, and even her mind. The disorders of her pelvic organs have no more to do with her nervous and mental diseases than lesions elsewhere in her body: indeed, they have less to do with her psychoses and neuroses than most of her other organs, for, as in the male sex, the chief causes of their neuro-psychoses are to be sought in the intrinsic disorders of the nervous system itself, or in perverted nutrition of the

nervous system dependent upon affections of the gastro-intestinal tract, kidneys, liver, lungs, heart, etc., and upon pathological blood states. It is true that puberty, adolescence, the puerperum, menstruation and the menopause are often closely related to the outbreak or to the exacerbation of many nervous and mental disorders, but the pelvic organs themselves play but a small role in these physiological commotions. They have to do with the whole organism of woman. These commotions influence the entire biological unit. They disturb for a time the intricate and harmonious adjustments of that central nervous system which serves to correlate and govern the thousands of delicate functions performed within the body, so that during such periods of unstable equilibrium, the chief factors in the etiology of the neuroses and psychoses find the biological unit more vulnerable to attack."

I have intentionally quoted extensively from Dr. Peterson's paper because it expresses tersely, and yet definitely, the position of the general practitioner in these disorders. It is not with myopic observation that the female economy is to be considered when in a pathological condition; and yet this is the view taken by many able men. The uterus, its displacements, its affections, obtain a commanding importance, and every other consideration is relegated to a position of secondary consequence. Fortunately a happy change is taking place in the direction of conservatism. The operative wave which swept over the country a decade or so ago, which began in Germany, and increased with such force and rapidity as to make its influence felt on this side of the Atlantic, is fast receding. During the period when it was at its height, the generative organs of the female became the legitimate, or rather was it not the illegitimate, field of every tyro who wielded a scalpel, and whose surgical knowledge was in proportion to his scientific skill.

No uterus, whether virginal or parturient, was safe from his explorations, and it was with a sort of a ghoulish glee that the embryo operator boasted of his many operations upon the *sanctum sanctorum* of woman. No matter how far-fetched appeared the relationship between the symptoms given and the involvement of the uterus, the latter was the organ to be attacked. The desire for operating permeated every branch of gynæcology, and the example of men who, on account of their position as teachers, and their eminence in the profession, should have recognized the evil which they were propagating, was closely followed by students sent out from the large medical centres. Finally this Moloch was satiated, and exhausted from their arduous labors the gynæcologists who had so successfully carried on this warfare against the offending uterus, ceased their attacks, though the echoes of these past assaults are still heard.

The domain of nervous disorders offered a fruitful field for experimental observations, for a woman assuming to be afflicted with a nervous complaint can discover more fictitious symptoms in

the course of an examination than would fill a good-sized volume. And as the majority, if not all, of those symptoms are of a subjective character, and all the organs, except the womb, where there existed slight laceration, were perfectly normal, the latter *must* be the cause, and should be operated upon, and what is more to the point, and to the advantage of the gynæcologist, was operated upon. These assertions are not hypothetical, but borne out by ample evidence. Let us once more listen to Dr. Peterson's wise words: "I take the stand, therefore, that the field of the gynæcologist in the domain of nervous diseases is comparatively restricted and unimportant, and I, in common with the best men of their own specialty, raise my voice in strong protest against the still prevailing tendency to enlarge the field of operative gynæcology by *unjustifiable* and *unscientific* surgical interference (the italics are ours) in cases of nervous and mental disease. It is better to do too little than to do too much. It is better to err on the side of science than to give the patient the so-called 'benefit of the doubt,' which should be called the affliction of the doubt. Let the gynæcologist by all means treat any serious disease of the pelvic organs which may be present in any case of nervous or mental disorder just as he would a similar affection in an otherwise sound and sane woman, but let him not sacrifice upon the altars of strange gods those who trust to his knowledge, skill and broad judgment. The reflex neuroses and psychoses are will-o'-the-wisps that lead one into obscure places, into a maze, and then vanish, leaving him astray, bewildered, remote from any landmark."

What is the duty of the general practitioner in this and other affections of a similar character? It is to exhaust the resources of his skill, therapeutic and otherwise, until he feels that he has fulfilled his obligations to his patient. It is not his duty to send her to a specialist simply because he discovers some infinitesimal solution of continuity of the genital tract. The habit of introspection with which many women are unfortunately afflicted, the proneness to magnify the lesser evils of domestic life, the irritability associated with maternal cares have more to do with the creation of neuroses than all the ills connected with pathological conditions of the uterus.

Medicine has now been reduced to the exactitude of a scientific basis, and its principles should be applied scientifically and not in a hap-hazard or empirical manner. The evil of constipation in many women has produced temporary insanity. The generation of toxins in the alimentary tract, and their non-elimination through the proper channels, has produced discord in many otherwise happy homes. The application of suitable remedies to the uterus in various acute and subacute diseases will frequently make an operation unnecessary.

A change of environment will have a most salutary influence upon a woman whose nerves dominate her life. Each patient should be closely studied, and the more attention the general

practitioner gives to the individual peculiarities of those whom he is called to treat, the better results will he achieve. In the past there has been too much cutting, too much operating, too much amputating on the part of the gynæcologist whose success was often estimated by the number of alcohol-preserved ovaries he displayed. The surgeon, too, has sinned in this respect, but not to the same degree as the operative gynæcologist. The former more quickly responded to the advances of scientific medicine, and acknowledged the valuable discoveries made in the realms of pathology. He does not now cut down upon the important parts of the body without due forethought and consideration, and is apt to call the purely medical man to his aid before attacking the internal organs. The power of diagnosis is the most helpful aid the general practitioner can possess, and every energy should be concentrated in mastering the details that go to make up an accurate conception of the disease.

We are not among those who assert that the day of the general practitioner is passed, that the specialist now holds sway. On the contrary, we believe that the sphere of the general practitioner's influence is constantly widening. He has been in the past a most unfortunate advocate of his interests, and he himself has done more to undermine the position he once held in the eyes of the people than the combined influence of the specialists. Not that we wish to say one word in derogation of the specialist's position. On the contrary, all men who achieve the highest success must necessarily be specialists, and more. In this latter category may we place the general practitioner who keeps abreast with the best medical thought of the day, who closely follows the revelations which science is constantly making, who finds with the loss of his hair on the outside, the more gray matter on the inside of his cranial cavity. The majority of general practitioners move in an arc, instead of the whole circumference of the circle, and the sooner they realize the possibilities afforded in mastering the details of medicine, as well as its general principles, the more readily will they resume the position they once held.

Dr. James G. Caven, of Toronto, was married on the 19th of last month.

Among the home-comers who have been cordially welcomed after an absence in England, are Surgeon-Major Nattress and Mrs. Nattress, Dr. Gilbert Gordon and Mrs. Gordon.

Dr. Robert J. Dwyer, the popular superintendent of St. Michael's Hospital, was married in New York on Wednesday, October 12th, to Miss Teresa Lumage, of St. Louis. The ceremony, which was private, was performed by Rev. Father McMahon, of St. Patrick's Cathedral. After the ceremony breakfast was served at the Waldorf-Astoria. Dr. and Mrs. Dwyer arrived in Toronto on Saturday, October 15th.

Selected Articles.

IMPROVEMENTS IN THE IRRIGATION TREATMENT OF GONORRHŒA.

BY FRED C. VALENTINE, M.D.

Professor of Genito-urinary Diseases, New York School of Clinical Medicine; Genito-urinary Surgeon, West Side German Dispensary, etc.

GOLDBERG,* in summarizing the results obtained by all authors on the irrigation treatment of gonorrhœa, shows that sixty per cent. of the gonorrhœas so treated were cured within ten days, thirty per cent. within two weeks, five per cent. required a longer period, because of indulgence in sexual intercourse or alcohol, or both, and the remaining five per cent. stand recorded as failures.

When it is considered that his figures embrace those of authors who wrote condemning this method, the average results are simply surprising. It seems inconceivable, in view thereof, how any other mode of treating gonorrhœa can still have a foothold in the profession.

The objections this method had to combat were valid only to a degree. They were principally the large amount of work imposed upon the physician and uncleanliness. The apparatus having now been simplified, the work is reduced to a minimum, can be more thoroughly performed, and only gross carelessness or inexcusable awkwardness will cause the novice to soil the patient, himself, or the office, by irrigations.

The results obtained by some five hundred American physicians from irrigating in gonorrhœa and other genito-urinary affections wrest this method from the realm of the enthusiastic promoter; the personal equation has ceased to be an element in its advocacy. Those who but test it are at once assured of the following facts:

1. Every urethra, not too tightly strictured, and every bladder can be irrigated without a catheter.

2. Irrigations, properly employed, will cure gonorrhœa quicker than any other mode of treatment.

3. Internal medication is futile; hand injections are useless.

Other arguments in favor of this method would be fitting in an article not limited to technique. In its description, elegance of

* "Die Behandlung der Gonorrhöe mit Ausspülungen von übermangansaurem Kali." Centralblatt für die Krankheiten der Harn-und Sexual-Organe. Band vii., Hefte 3 und 4.

diction is not sought; clear, succinct exposition is the only object in view.

Most of the directions will appear self-evident to the majority of practitioners; some may seem unnecessarily complicated. In order to omit nothing, I emulate that "infinite capacity for taking pains" which Carlyle offers as a substitute for genius.

For Anterior Irrigations.—1. Have the patient drop his trousers and drawers to his knees and fold his shirt upward.

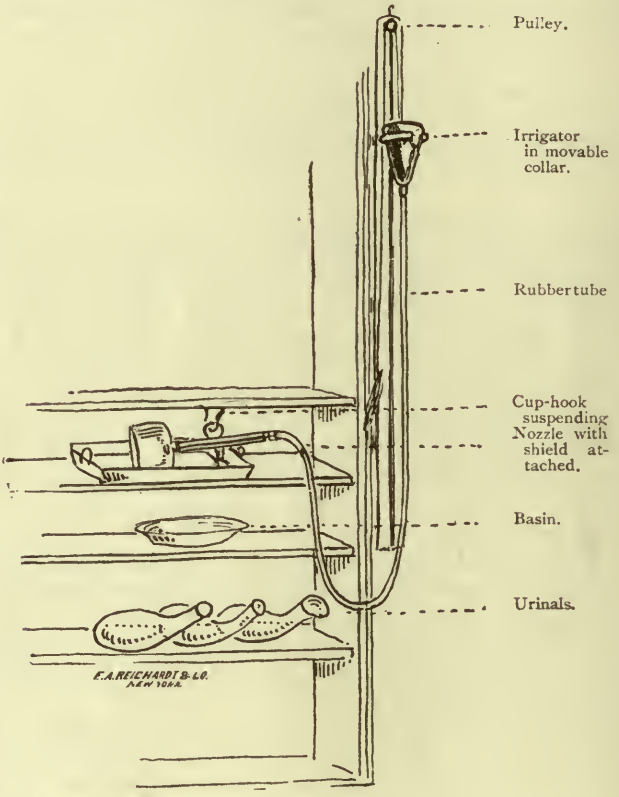


FIG. 1.—Convenient Arrangement for Author's Irrigating Apparatus.

2. Adjust a rubber apron twenty inches square, with a hole in its upper third, to allow the penis to pass through.

3. Close the stopcock of the apparatus and hang it on a convenient cuphook, or preferably place it in a basin containing mercuric bichloride, 1–6,000 (about one grain of bichloride of mercury in twelve fluid ounces of water).

4. Put the solution to be employed into the irrigator, at a temperature of 110° to 120° F.

5. Place the irrigator in the brass ring, which has been screwed to the wall nine feet from the floor. This suffices practitioners who

have not many irrigations to perform daily; but in an extensive genito-urinary practice it proves inconvenient. For those so engaged, an elevating slide is devised. By it the irrigator can be easily lowered for filling and rapidly raised for use. The illustration fully explains its employment.

6. When the irrigator is placed in its collar (or, if the elevator

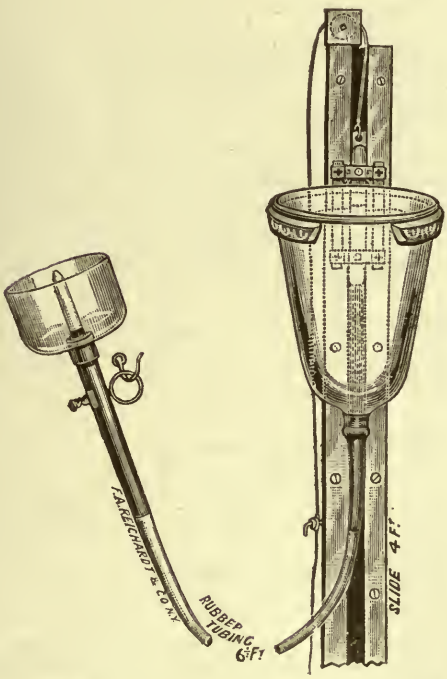
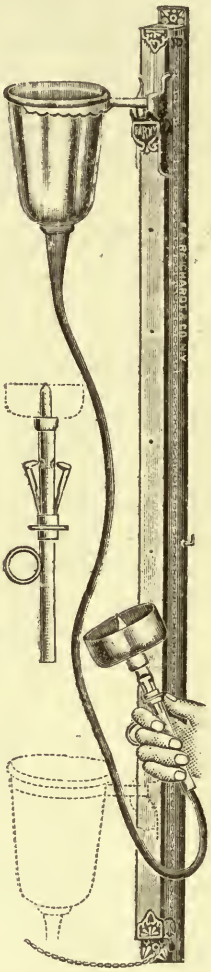


FIG. 2.—Showing Details of Mounting Irrigator and of Connecting Stopcock, Shield and Nozzle. Replaced.



Latest Irrigator and Stopcock.

is used, raised nine feet from the floor) attach the proper nozzle. This is easily accomplished by holding the stopcock in one hand and inserting the nozzle into the free end of the rubber tube until it is firmly held there, but not so far back as to press upon the ball of the stopcock.

The selection of the nozzle naturally depends upon the size of the meatus. Experience has led to three forms for the male urethra.

7. Order the patient to empty his bladder entirely, unless he has very much pain on urinating.

8. Place the patient on a wooden chair, as far forward as he can comfortably sit, his shoulders resting against the back of the

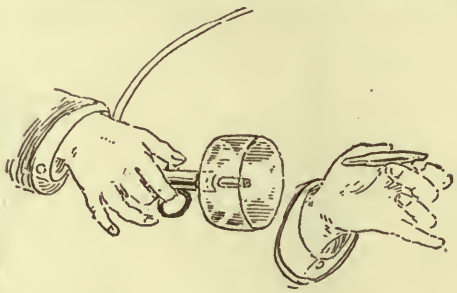


FIG. 3.—Inserting Nozzle.

NOTE —On inserting nozzle into rubber tubing, see that neither tubing nor glass is wet; because, if they are, the rubber will not hold the glass tightly and is apt to slip out.

chair. Place his feet at the outer sides of the front feet of the chair. It will be desirable to have the patient throw his head backward, projecting his expirations upward, instead of into the operator's face. Giving this direction as part of the proceeding in all cases prevents those who are unfortunate enough to have a malodorous breath from learning that an invidious distinction is made.

FIG. 4.—Nozzle A, for a Normal Meatus.

FIG. 5.—Nozzle C, for a very Small Meatus.

FIG. 6.—Nozzle B, for a very Large Meatus.

NOTE —Nozzle B is used only in posterior irrigations to be described farther on.

9. Hand the patient a tin wash-basin, twelve inches in diameter, or preferably one of enamelled or agate ware. Let him hold it with both hands, slightly tilted toward himself, his penis resting in the basin.

10. Stand at the patient's right side. Raise his penis by your third, fourth and fifth fingers of the left hand, and press it firmly

but gently against the ball of your left thumb. This leaves the thumb and index finger free to manipulate the foreskin and glans, as may be required.

11. Take the stopcock with its shield in the right hand, the thumb resting upon the top of the bar, the index finger passing through the ring.

12. Contract the thumb slightly, releasing the stopcock bar from its uppermost notch. Raise the thumb very slowly, allowing a very gentle flow of the solution to escape. Let this run upon the outer surface (skin) of the prepuce. Turn the penis until entirely clean exteriorly.

13. With the left thumb and index finger slowly retract the foreskin while the stream plays upon all its parts, until its mucous surface and the glans are thoroughly cleansed.

FIG. 7.—Cleansing Prepuce and Glans.

NOTE.—This illustration should show the patient seated on the front edge of the chair, his trousers dropped below his knees, his shoulders resting firmly against the back of the chair. The operator's left thumb and index finger should be contracted for manipulation of the prepuce and glands.

14. Hold the glans with the left thumb and index finger slightly bent, everting the lips of the meatus, while the stream plays upon them. Still more opening the meatus and increasing the force of the stream, it is directed into the meatus.

15. When every vestige of discharge is washed from all visible parts of the meatus, the nozzle is placed closely to it, and the force of the stream gradually increased until its impact is felt against the left middle finger. By this time about one-fifth of the contents of the irrigator has been used. The remaining four-fifths are consumed in the following steps;

16. When the second fifth of the solution has flown into the

basin, relax the grasp of the left middle finger upon the urethra. The force of the current being still further increased, it will strike the fourth finger of the hand holding the penis.

17 and 18. Relax the little finger, in the manner directed under 16.

After anterior irrigation it is well to cover the meatus with a layer of cotton soaked in mercuric bichloride, 1–6,000, and to direct the patient to renew this application after each urination.

For Posterior or Intravesical Irrigations.—Irrigation of the

Fig. 8.—Anterior Irrigation in the Erect Posture.

Note.—Some patients prefer to have their urethras irrigated while standing; there is no objection to this. Oothers, who are very much afraid of pain, may be irrigated lying down. The details of irrigation in this posture will be discussed under "Posterior Irrigation."

posterior urethra premises overcoming the compressor urethræ (shut-off muscle). The force of fluid that can accomplish this must necessarily overcome the sphincter vesicæ as well, as soon as the posterior urethra is filled. The sphincter vesicæ being but a feeble bundle of muscular fibres, irrigation of the posterior urethra, which practically is a part of the bladder, cannot be dissociated from intravesical irrigation.

The detailed steps of a posterior or intravesical irrigation are:

(*a*) Irrigate the anterior urethra, before washing out the pos-

terior urethra, as laid down under rules 1 to 18 *supra*, using, however, only half the quantities of the fluid directed in rules 15, 16 and 17. The reason for this variation is in the copious double washing the urethra receives by the entrance of the fluid and its exit from the bladder.

(*b*) If the meatus is of average size, use nozzle A; if very small, nozzle C, while for a very large meatus, nozzle B should be employed.

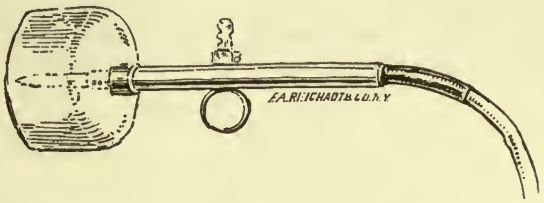


FIG. 9.—Improved Stopcock.[1]

NOTE.—The perpendicular bar should show two small notches anteriorly and one posteriorly.

(*c*) Seat the patient as for anterior irrigation (see Fig. 7), except that his sacrum (not the tuberosities of the ischium) must rest upon the extreme front edge of the chair.

(*d*) Irrigate the anterior urethra; have the patient either sitting as described under *c*, lying down, or standing.

(*e*) Then, occluding the meatus with the nozzle, order the patient to breathe deeply and endeavor to urinate, preferably as if trying to "squeeze out a last drop." The deep respirations release the bladder from the superimposed weight of the abdominal and pelvic contents; the efforts at urination relax the compressor; in many

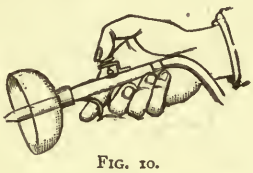


FIG. 10.

NOTE.—Ambidextrous surgeons may reverse 10 and 11 at their convenience.

cases, however, these aids become unnecessary after a first effort. Almost invariably the tips of the left fingers, resting upon the urethra, will at once detect a decided purling as the liquid passes into the bladder through the now relaxed sphincters.

(*f*) After performing a few irrigations the surgeon's left hand grows accustomed to the sensation of the bladder filling, and before the patient expresses a desire to void it he closes the stopcock.

(*g*) Hold the stopcock in the right palm, take the basin with the right thumb on its inner, the right fingers on its outer surface.

[1] I am indebted to Dr. Union Worthington, of Salt Lake City, for valuable suggestions in modifying the mechanism of the stopcock.

Extend the left hand, which has dropped the patient's penis into the basin, to the shelf on which the glass urinals are kept. Take one of them, and while removing the basin hand the patient the urinal. It requires but slight dexterity to do this so quickly as to prevent dribbling of the solution on to the apron or the patient's garments.

(*h*) Order the patient to stand up, as the majority can thus relieve their bladders more quickly.

(*i*) The quantity of the fluid used necessarily varies with the size of the bladder. The average bladder will hold about two hundred and fifty centigrams (about seven and a half ounces).

FIG. 11.—Removing Pan and Handing Patient Urinal.

(*j*) The first irrigation often yields quite a turbid and brownish fluid. This is due to the admixture of the vesical contents. If a very weak solution of potassic permanganate is used, it may come from the bladder almost colorless, as a small quantity of urine will decolorize this drug.

(*k*) Occasionally the liquid will balloon the urethra, give the patient pain, and refuse to enter the bladder, despite all efforts. Then desist at once, and order the patient to urinate. It is surprising how small a quantity of urine can arrest irrigation. This being voided, the second attempt at irrigation will be readily successful.

(*l*) In most cases turning on the full stream at once will produce urethrospasm, entirely preventing irrigation. In such instances interrupt the operation and let the contents of the penis escape into the pan. Then again occlude the meatus with the nozzle and

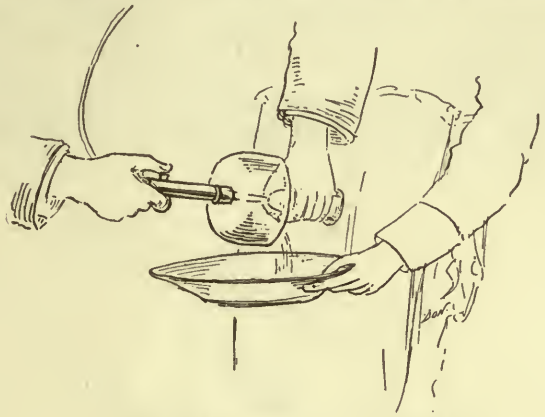


FIG. 12.—Intravesical Irrigation in the Standing Posture.

NOTE.—The drawing should show the operator's right thumb more elevated and the stopcock bar raised. The drops apparently spurting into the basin are supplied by the draughtman's imagination, as none escape during such injection into the bladder.

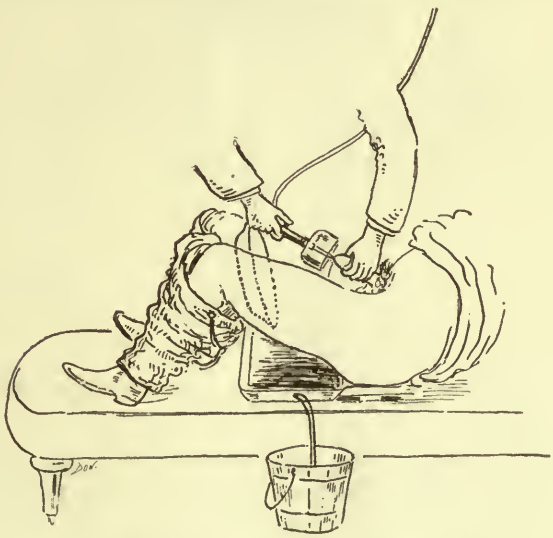


FIG. 13.—Intravesical Irrigation in the Recumbent Posture.

NOTE.—This cut should show the patient lying flat on his back, his buttocks higher than his shoulders.

allow the fluid to flow into the urethra very gently. As soon as the urethra begins to distend, again order the patient to breathe deeply and to strive to urinate. With each respiratory effort allow the button of the stopcock to rise, and almost to close it at each

inspiration. Every such movement will be accompanied by the entrance of some fluid into the bladder. As soon as this is begun, the remainder of the irrigation will be easy.

Variations in posture: Many patients' bladders can be irrigated quite easily while they stand. As some people, however, faint very readily, irrigation in the upright position should not be performed save as a last resort in those very rare instances when the other postures have failed.

A patient who cannot be irrigated in the sitting posture, or who is prone to faint, should be treated in the recumbent position.

FIG. 14.—Posture of Patient when Exposing the Meatus for Anterior Irrigation.

Then no apron is used. The trousers and drawers are dropped almost to the ankles; the shirt and undershirt are folded upward. He is then laid upon a sofa or operating-table, his buttocks projecting far forward from an irrigating bedpan. For additional safety a wash-basin may be placed between the thighs, inclined so as to divert any possible spluttering of the fluid into the bedpan's tin receptacle. The steps of anterior and posterior irrigation do not differ from those employed in the other positions.

Irrigating the Female Urethra and Bladder.—The nozzle used for this purpose is merely a nozzle A, of double length. Place

the patient in the ordinary dorsal gynæcological position upon a Kelly pad. Wash out the vulva and vagina as in an ordinary vaginal irrigation. Place the left palm before the mons veneris, separate the labia with the index and middle fingers, to expose the meatus. Direct the point of the nozzle to the meatus and send a gentle stream against it. Gradually increase the force of this stream until the meatus and entire introitus vaginæ are thoroughly clean. Wedge a triangular pus basin between the patient's thighs until one point of the basin firmly compresses the fourchette. Insert the nozzle into the meatus, but do not occlude it, so as to allow the fluid to escape into the glass shield and thence partly into the pus basin and partly on to the Kelly pad. Increase the force of

FIG. 15.—Irrigation of the Female Urethra.

NOTE.—The dotted lines represent the pus basin.

the stream while sinking the nozzle still farther into the meatus, until no more fluid escapes. The sphincter will quickly yield, and the fluid enter the bladder. Remove the pus basin; replace it by an inverted ordinary hand-basin. Order the patient to empty her bladder. The escaping fluid strikes the hand-basin and falls into the Kelly pad, and thereby is conducted into the bucket on the floor, into which its end has been inserted. Irrigation of the female urethra and bladder, conducted with all the above attention to detail, will be accomplished without soiling the patient's garments or even moistening her thighs. A heavy towel passed under the patient, immediately above the inflated rim of the Kelly pad, will serve to dry her buttocks after the pad is taken from beneath her.

Notes on Irrigation.—Very rarely is a patient found with such hyperæsthesia as to render irrigation impossible without a local anæsthetic. A drachm or two of a four per cent. solution of cocaine or eucaine will quickly arrest all sensation.

Anœsthetizing the Urethra.—Fill the syringe (preferably Kollmann's cocaine syringe, whose detachable tips can readily be sterilized). Inject a few drops slowly and the remainder with enough force to send it as far into the urethra as possible. Close the meatus with the left thumb and index finger and stroke the whole length of the urethra with the right index finger, from before backward. The fluid will soon pass beyond the peno-scrotal juncture. It then can be pressed toward the bladder along as much of the

FIG. 16.—Intravesical Irrigation.

urethra as can be felt in the perineum. This procedure may be repeated once to insure absolute anæsthesia,

Painlessness of Irrigations.—Ordinarily anæsthesia is not required. A second irrigation is usually painless. In a large experience but one case (as the patient thought) required cocaine before each irrigation. The second alleged cocainization was with distilled water, which quite sufficed to calm the patient's mind.

Cleanliness of Irrigations.—Any irrigation, properly conducted, should not soil anything except the surgeon's left fingers. These can be quickly cleaned of the permanganate stain with a saturated solution of oxalic acid.

Care of the Apparatus.—After each irrigation fill the apparatus with clean water to carry off any small quantity of the solution that may remain.

Asepsis of the Nozzles.—1. Immediately after use, detach the nozzle, and place it in the basin.

2. Let hot water run over it.

3. Boil it in a solution of caustic soda for half an hour.

4. Take it from the solution with sterilized forceps, and place it in a solution of corrosive sublimate, 1–500 (sixteen grains to the pint).

5. Before use again rinse it in clean water.

The Solutions Used most frequently in anterior and intravesical irrigations are potassic permanganate, mercuric bichloride, silver nitrate, and cupric sulphate.

Potassic permanganate: In previous publications* I advocated the solutions proposed by Prof. Jules Janet, of Paris, to whom sufficient credit can never be given for popularizing the irrigation treatment. But the exigencies of business in our country, and perhaps greater urethral and vesical susceptibility here, have led me to change Janet's formularies in several regards. For the practitioner's convenience they are here tabulated, as changed:

In Acute Gonorrhœa.—

First	day, first visit:	Anterior irrigation	....	1–2,000
"	" 7 P.M.	Anterior irrigation	.....	1–4,000
Second	" 9 A.M.	" "	.....	1–3,000
"	" 7 P.M.	" "	.....	1–4,000
Third	" 9 A.M.	Intravesical "	.....	1–6,000
"	" 7 P.M.	Anterior "	.....	1–6,000
Fourth	" 9 A.M.	Intravesical "	.....	1–3,000
Fifth	" 9 A.M.	" "	.....	1–3,000
Sixth	" 9 A.M.	" "	.....	1–3,000
Seventh	" 9 A.M.	" "	.....	1–2,000
Eighth	" 9 A.M.	" "	.....	1–2,000
Ninth	" 9 A.M.	" "	.....	1–1,000
Tenth	" 9 A.M.	" "	.....	1–1,000

This last is followed, at the same hour, by an anterior irrigation of 1–5,000.

In Chronic Gonorrhœa.—The conditions, as revealed by the urethroscope, govern the treatment fully as much as does the microscopic examination of the discharge in acute urethritis Of course, no one expects a chronic gonorrhœa to recover while the urethra is strictured or otherwise diseased.† But when no condition other than gonorrhœa affects the urethra the following

* Valentine: "The Technique of Urethral and Intravesical Irrigations." *Clinical Recorder*, February, 1896. "Chronic Urethritis," *New Albany Medical Herald*, 1896. "The Rapid Cure of Gonorrhœa," *International Journal of Surgery*, October, 1896.

† This is exhaustively discussed in a paper entitled "Chronic Gonorrhœa; Its Scientific Treatment," written for the second Pan-American Medical Congress, held at Mexico, in November, 1896.

formulary will apply, with such modifications as the individual cases may require:

First	day, first visit:		Anterior irrigation	1–3,000
"	" 7 P.M.		Anterior irrigation	1–6,000
Second	" 9 A.M.		Intravesical "	1–4,000
"	" 7 P.M.		Anterior "	1–4,000
Third	" 7 P.M.		" "	1–2,000
Fourth	" 9 A.M.		Intravesical "	1–3,000
"	" 7 P.M.		Anterior "	1–2,000
Fifth	7 P.M.		Intravesical "	1–3,000
			Anterior "	1–1,000
Sixth	" 7 P.M.		" "	1–1,000
Seventh	" 7 P.M.		" "	1–1,000
Eighth	" 7 P.M.		Intravesical "	1–3,000
			Anterior "	1–1,000

If, after the above irrigations have checked the discharges it recurs, as occasionally happens, the whole course should be repeated. This failing to cure the case, the cause will soon be exposed by careful urethroscopy and then prove amenable to treatment.

In a large genito-urinary practice it is well to consult convenience in the preparation of these solutions. In neighborhoods where many physicians are using the irrigation method some druggists make fresh solutions of potassium permanganate, containing twenty grains to the ounce of water. The solution is convenient in quickly making the dilutions required. The irrigator holds a thousand grams (about fifteen thousand grains): consequently to make of the above solution a

dilution	of	1	to	12,000,	fl. ℥	ss.	is required.
"	"	1	"	6,000,	fl. ℥	i.	" "
"	"	1	"	4,000,	fl. ℥	iss.	are "
"	"	1	"	3,000,	fl. ℥	ij.	" "
"	"	1	"	2,000,	fl. ℥	iij.	" "
"	"	1	"	1,500,	fl. ℥	iv.	" "
"	"	1	"	1,000,	fl. ℥	vi.	" "
"	"	1	"	500,	fl. ℥	iss.	" "

The objection to this solution is its instability. It will, however, not decompose within three or four days after it is made.

Practitioners who do not have occasion to perform many irrigations daily will find the two-grain tablets of potassic permanganate sufficiently convenient,

Mercuric bichloride frequently proves useful in obdurate cases. It may be added to the above irrigating fluid in dilutions of from 1 to 50,000 to 1 to 20,000, as corrosive sublimate and potassium permanganate are not incompatible.

Silver nitrate in solutions of from 1 to 10,000 to 1 to 1,000 proves serviceable, especially after urethral dilatations.*

Cupric Sulphate: In persistent urethritis without gonococci an anterior irrigation of solutions of cupric sulphate, from 1 to 2,000 to 1 to 500, often exerts a desirable influence as an occasional alternant with potassic permanganate.

Argonin: My experience with this drug is as yet limited. Early trials proved unsuccessful, probably because of faulty technique in dissolving it. Harold L. Lesser, Ph.G., pharmacist of the West Side German Dispensary, and Paul F. Metze, Ph.G., came to my aid, the former furnishing me with a ten-per-cent. solution for dispensary use and the latter with the same for my private pratice. Only then did I begin to yield to the persuasions of Arthur Lewin, of Berlin, to test argonin, to which he attributes direct specific gonococcocidal action. The results in some instances seem satisfactory in diminishing the discharge. I have used it up to five per cent. intravesically without the slightest disagreeable reaction. Its gonococcocidal influence, however, does not appear to exceed that of potassium permanganate. But whatever the drug used, the urethral and intravesical irrigations without a catheter are certainly the essential to its successful employment.

A detailed description of the conditions in which they are indicated would be beyond the scope of this paper. Suffice it here to say that, in addition to acute and chronic gonorrhœa, irrigations without a catheter should be employed after any and every instrumentation of the urethra or bladder. In not a single case does catheter fever (urethral fever) supervene, no matter how susceptible thereto the patient may be.

Due credit must be given Messrs. F. Alfred Reichardt & Co., of 27 Barclay Street, New York, for placing the resources of their establishment and workshops at my disposal in perfecting this apparatus. The many mechanical problems required to be overcome were met by valuable suggestions to the end of providing practitioners an easily manageable, effective outfit at a very moderate price.

Recent Improvements in the Irrigation Treatment.

Very great improvements have been made in the instruments and appliances of the irrigation treatment. Many suggestions of physicians have been adopted wholly or in part, and although only a short time has elapsed since the presentation of this paper the apparatus as manufactured now may be called reasonably perfect.

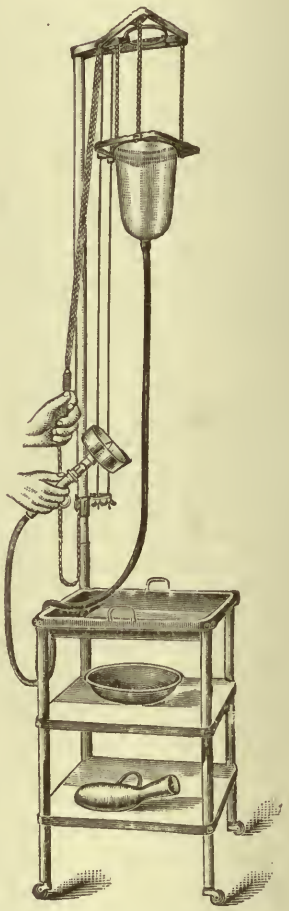
In the first place, all the parts which were originally made of cast iron, and liable to breakage, are made now of bronze, and, for instance, if it were necessary to improvise a percolator which

* Valentine: "The Non-Operative Treatment of Urethral Strictures," *Clinical Recorder*, July, 1896.

would be too large or too small, the bracket could be shaped by compressing or expanding it without any danger of breakage.

The stopcock, we think, is a matter of perfection. It closes absolutely when pushed together and remains so, or yields to the slightest touch when it is operated by anyone.

The ideal shield used is made of glass, as it allows a better view during treatment, but as glass is fragile a metal shield may be used instead, which, while less easily kept nice and clean, will last longer.



The running gear has been perfected to what it is now, after more than twenty different changes have been tried. It is now working smoothly, sliding easily and gives general satisfaction.

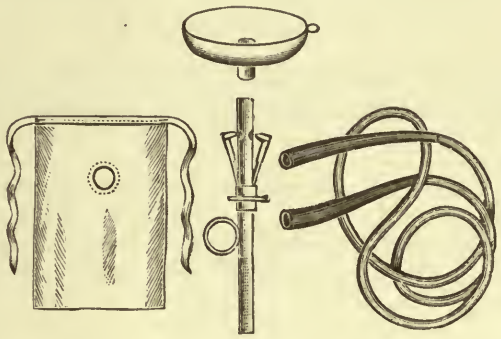
The funnel tube, made of the best rubber, is reinforced, at the ends where it has to stand the greatest pressure.

A new pattern of stand has also been devised, adapted especially for the use of hospitals, clinics, or for general use. The percolator is of over half a gallon capacity.

Of extraordinary advantage are the tablets of permanganate of potash. While a concentrated solution of permanganate of potash prepared in small quantities may be very well in large clinics or with specialists who give many irrigations a day, it is not as well when it is used up slowly. Therefore for preparing the solution devised by Dr. Valentine, the weakest of which is made of $\frac{1}{2}$ drachm of fluid representing $1\frac{1}{4}$ grains, tablets each containing $1\frac{1}{4}$ grains (or $\frac{1}{2}$ drachm) have been made.

The difference between an ordinary inflammation of the urethra and gonorrhœa can only be diagnosed with absolute certainty by showing the infected gonococci. A microscopical analysis cannot be too urgently recommended. Every practitioner nowadays is more or less familiar with the use of the microscope, but he may not be as familiar with recognizing the gonococci. For this reason the manufacturers of the instrument have, at considerable expense, had a chart prepared giving a picture of the gonococci in different ways just as they look under the microscope when stained. This is copied from Gerster's "Aseptic and Antiseptic Surgery" by permission of Messrs. D. Appleton & Co. and is copyrighted.

It contains directions for preparing and staining microscopic slides written for the purpose by Prof. Max Meyer, M.D., Biologist of the Board of Health of the city of New York. The whole is composed as if it were intended for students, and gives the *modus operandi* in a short and precise way.



Tablets as well as charts are supplied gratis to each purchaser of the apparatus as made by the original manufacturers, F. Alfred Reichardt & Co.

The use of a heavy rubber apron for the patient is also especially recommended to avoid staining the clothing. Illustration of this apron is given herewith.

University of Texas.—The Regents of the University of Texas have appropriated $46,000 for the medical college of Galveston.—*Railway Surgeon.*

Degrees at Queen's.—Queen's University, as a result of the supplemental examinations, has granted the following degrees: Master of Arts—J. K. Johnston, West Lorne; P. M. Thompson, Allan's Mills. Bachelor of Arts—P. F. Munro, Lancaster; J. A. Supple, Pembroke; Miss Sophia Williams, Ottawa. M.D., C.M.—H. G. Ogilvie, Jamaica; H. F. Kilborn, Oso Station.

Special Announcement to the Profession.—Dr. Playter has now secured a few nice sunny rooms for patients in two localities: one near Toronto, with an elevation of over 500 feet, and one farther north, elevated over 1,000 feet (higher than Muskoka), both with dry, sandy soil and on the Metropolitan Electric Car Line, in which patients can receive nearly all the advantages of the best "sanitariums," and more than some of these, on reasonable terms. Patients so placed by physicians under Dr. Playter's care, may be still retained, practically, in a large measure, by their own regular physician; as in frequent consultations, personally in the case of Toronto physicians and by correspondence in the case of those in distant places. Address Edward Playter, M.D., 185 Carlton St., Toronto.

Proceedings of Societies.

EIGHTH ANNUAL MEETING OF THE AMERICAN ELECTRO-THERAPEUTIC ASSOCIATION, BUFFALO, N.Y.

THE eighth annual meeting of the American Electro-Therapeutic Association was held in the rooms of the Society of Natural Sciences, Library Building, Buffalo, N.Y., on September 13, 14 and 15, 1898, under the presidency of Dr. Charles Rea Dickson, of Toronto, Ont.

FIRST DAY.

After the meeting had been called to order by the President, at 10 a.m., an opening prayer was offered by Rev. Orin P. Gifford, after which a brief business session was held, the report of the Executive Council presented, and the privileges of the floor accorded to all members of the medical profession and guests.

Dr. Conrad Diehl, Mayor of Buffalo, welcomed the Association to the city. Dr. Francis B. Bishop, of Washington, D.C., responded to the address of welcome.

The President announced that delegates had been appointed from medical societies as follows: Medical Association of Central New York, Dr. Wm. C. Krauss, the president; Medical Society of the State of New York, also Medical Society of the County of Erie, Dr. Lucien Howe, president of the latter; Buffalo Academy of Medicine, Dr. Floyd S. Crego; Ontario Medical Association, Dr. G. Sterling Ryerson, of Toronto.

Brief remarks were made by Dr. Henry McClure, of Norwich, England, honorary fellow; Dr. Thomas E. Holland, of Hot Springs, Ark., a guest; Dr. A. D. Rockwell, of New York; Dr. Lucien Howe, of Buffalo, and others.

The President announced that many letters of regret had been received.

Dr. Ernest Wende, Buffalo, Chairman of Committee on Arrangements, reported the provisions made for the entertainment of the Association.

Reports of the standing committees on scientific questions were received: "Meters," by Dr. Margaret A. Cleaves, of New York; "Constant Current Generators and Controllers," by Dr. Robert Newman, of New York; "Electric Light Apparatus for Diagnosis and Therapy, and the Rœntgen X-Ray," by Mr. J. J. Carty, E.E., of New York. The following papers were read: "Phlebitis—a Clinical Study," by Dr. Margaret A. Cleaves, New York; "The

Diagnostic and Therapeutic Relations of Electricity to Diseases of the Central Nervous System," by Dr. A. D. Rockwell, New York.

The Association adjourned at 12.30, and was again called to order at 2 p.m. by President Dickson.

The first paper, by an honorary fellow of the Association, Dr. Georges Apostoli, of Paris, "New Uses of the Undulatory Current in Gynæcology," was read by Dr. G. Betton Massey, of Philadelphia.

"Electricity in the Treatment of Uterine Fibromata," by Dr. Felice La Torre, of Rome, Italy, honorary fellow, was read by Dr. John Gerin, of Auburn, Secretary of the Association. "Electro-Therapeutics in Gynæcology," by Drs. Georges Gautier and J. Larat, of Paris, France, honorary fellows, was read by Dr. Dickson, President of the Association.

A paper by Dr. William J. Herdman, of Ann Arbor, Mich., on "The Use of Electricity in Gynæcology," was read by title. "The Treatment of Uterine Fibroids by Small Currents, Administered Percutaneously," was the subject of a paper by Dr. Richard J. Nunn, of Savannah, Ga.

Dr. W. H. White, of Boston, read a paper by Dr. Adelstan de Martigny, of Montreal, on "Treatment of Menorrhagia by Weak Current and Silver Internal Electrode."

The Association adjourned at 4.30 p.m.

SECOND DAY.

An Executive session of the Association was held at 10 a.m., President Charles Rea Dickson, of Toronto, in the chair.

The report of the Executive Council on the revision of the constitution and by-laws was adopted, making some important changes in the governing rules of the Association.

When the Scientific session opened at 10 o'clock, the first paper was presented by Dr. Lucien Howe, of Buffalo. Dr. Howe's subject was "The Method for Using Cataphoresis in Certain Forms of Conjunctival Inflammation."

Dr. Howe illustrated his remarks by means of a number of his patients. His paper was received with great interest, and a lengthy discussion followed.

Dr. Robert Newman, of New York, presented an able paper on "Electricity in Deafness and Stricture of the Eustachian Tube." In his address Dr. Newman rehearsed the history of a peculiar case which came under his professional care. He also cited a number of other cases, which had been reported by other physicians.

The discussion which followed Dr. Newman's paper was led by Dr. Howe, followed by Dr. A. D. Rockwell, of New York.

Dr. Howe presented to the Association a message of regret from Dr. John O. Roe, of Rochester, N.Y., who was called out of the country on business and was therefore unable to present his paper on "The Use of Electricity in Diseases of the Nose and Throat."

Dr. Grover W. Wende, of Buffalo, read a paper on "Electricity in Acne Vulgaris and Acne Rosacea."

Dr. G. Betton Massey, of Philadelphia, led the discussion of Dr. Wende's paper, followed by Dr. Margaret A. Cleaves, of New York.

Dr. William C. Krauss, of Buffalo, being ill and under a physician's care, was unable to present the paper set down for him, "A Case of Lightning Stroke without Serious Consequences."

Dr. G. Sterling Ryerson, of Toronto, was introduced by President Dickson and spoke briefly on "Cases of Lightning Stroke Causing Diseases of the Eye," giving a number of instances of the effect of lightning, in which the results were not permanently serious.

Dr. Francis B. Bishop, of Washington, presented a paper on "High Tension Current in Neuritis," which gave rise to much discussion.

The final paper of the morning session was by Dr. Charles Rea Dickson on "Electricity in the Treatment of Goitre."

At one o'clock the Association adjourned until two p.m.

Upon reassembling President Dickson delivered his annual address, a part of which is as follows: "For many years past the thoughts of those who are interested in the various branches of this wondrous subject, electricity, have turned to Buffalo, and it has been the Mecca of the Electric Pilgrims. On its outskirts the wildest dreams of the Arabian Nights have been outdone. Science, ever triumphing over Nature, has harnessed that most beautiful of all Nature's handiwork, and as though by the subtle touch of the wand of the magician, the very country has been transformed and solitary fields have become veritable hives of human industry, the outcome of the mighty power of Niagara transformed and transmitted. Massive factories are seen on every side where but a few short years ago were found naught but vacant lots. To us, witnessing it for the first time, it is a milestone of progress, illustrating man's ingenuity, the triumph of his brain. Buffalo is truly the electrical city of the age."

"Surgery," said Dr. Dickson, further on in his address, "is being divided and subdivided until at one time we feared that we were to be confronted with an appendix surgeon. Our patients are reaping the benefit of all this."

After giving briefly a history of the Association, its growth, the reasons for its existence and the manner in which its work was carried on, Dr. Dickson concluded his exceedingly interesting address as follows: "A rock we must avoid is that on which many a stronger society than our own has come to grief—the clique. And the furtherance of personal ambition or personal designs must be shunned." Many suggestions embodied in the address were referred to the Executive Council of the Association.

Many Buffalo physicians attended the afternoon meeting. The programme was made up of a series of Ten-minute Talks on

Electro-therapy. In a brief introduction the President explained the purpose and scope of the talks which had been prepared for the special benefit of the busy practitioner, technicalities and details being avoided as far as possible, it being intended that the Talks should be suggestive rather than exhaustive.

"The Effect of Electricity upon Tissue Metabolism," by Dr. William J. Herdman, of Ann Arbor, Mich. Read by title.

The next paper was by Dr. J. H. Kellogg, of Battle Creek, Mich., on the same subject, but Dr. Kellogg also was absent. Read by title.

Dr. G. Betton Massey, of Philadelphia, presented a paper on "The Galvanic Current in Gynæcology."

The next paper was "Surgical Uses of Electricity," by Dr. Charles Rea Dickson, President of the Association.

Next on the programme was a paper by Dr. G. Herbert Burnham, of Toronto, on "Combined Use of Medicinal and Electrical Treatment in some Affections of the Eye." Read by title.

Dr. Robert Newman, of New York, presented a paper on "Electricity in Genito-Urinary Diseases."

Dr. G. Betton Massey spoke on "Treatment of Malignant Growths by Means of Electricity."

A paper by Dr. Louis A. Weigel, of Rochester, on "Orthopœdic Uses of Electricity," was followed by a paper by Dr. Rockwell on "The Functional Neuroses, with Special Reference to Neurasthenia, Their Pathology and Treatment."

"Electricity in Diseases of the Nervous System," by Dr. William J. Herdman, Ann Arbor, Mich., was read by title.

The Association adjourned at 4.30 p.m.

A short business session of the Association was held from 8 to 9 p.m., at which the following officers were elected:

President—Dr. Francis B. Bishop, of Washington.

First Vice-President—Dr. Ernest Wende, of Buffalo.

Second Vice-President—Dr. W. H. White, of Boston.

Secretary—Dr. John Gerin, of Auburn.

Treasurer—Dr. Richard J. Nunn, of Savannah, Ga.

Executive Council—Dr. Robert Newman, of New York, and Dr. G. Betton Massey, of Philadelphia, three years; Dr. A. D. Rockwell and Dr. William J. Morton, of New York, two years; Dr. Charles R. Dickson, of Toronto, Ont, and Dr. Frederick Schavoir, of Stamford, Conn., one year.

Washington was selected for the convention next year, to be held September 19-21, 1899.

THIRD DAY.

An Executive session was held at nine o'clock, President Dickson in the chair.

A resolution was passed urging upon colleges and medical schools the necessity of establishing chairs for the teaching of

electro-therapeutics; or if that is not at once practicable, that more time be devoted to the teaching of this very important branch, and that the matter be more fully urged upon the attention of the Association of Medical Colleges.

The congratulations of the American Electro-Therapeutic Association were extended to the University of Buffalo for its progression in establishing a chair of electro-therapeutics in the medical college.

Many new members were elected, and the customary votes of thanks passed.

A general vote of thanks was also adopted, expressing the Association's deep appreciation of the courtesy and hospitality extended to the members during the convention in Buffalo.

At 10 o'clock the Executive session adjourned and President Dickson called the Scientific session to order. The first two papers on the programme were read by title. They were by Drs. Georges Gautier and J. Larat, of Paris, France, the first on "The Hydro-Electric Bath with Sinusoidal Current in Disease," the second on "The Use of the Hot Air and Light Bath in Disease."

A paper was read by the newly-elected President of the Association, Dr. Francis B. Bishop, of Washington, on "Alternating Dynamo Currents."

Dr. Margaret A. Cleaves, of New York, read a paper on "The Electric Arc Bath."

A paper by Dr. J. H. Kellogg, of Battle Creek, Mich., on "The Electric Light Bath,' was read by title. The next paper was read by John J. Carty, of New York, a well-known electrical engineer, on "Some Suggestions on the Possibilities of Cataphoresis." Mr. Carty gave a short, practical talk, which was very interesting.

Then came a paper by Nikola Tesla. The paper was read by Dr. White, of Boston. The subject was "A High Frequency Oscillator for Electro-Therapeutic Purposes." It was received with the closest attention and was one of the most interesting papers presented during the convention. Mr. Tesla's paper was the last read before the Association, the remainder of those on the programme being read by title, as follows:

"The Effect of High Tension Discharges upon Micro-organisms," Drs. J. Inglis Parsons and C. Slater, London, England.

"The Action of X-Rays upon Tuberculosis," Drs. J. Bergonie, of Bordeaux, and Teissier, of Paris, France.

"Two Years of Practice in Radio-therapy," Drs. Georges Gautier and J. Larat, Paris, France.

Dr. Newman, of New York, and Dr. Nunn, of Savannah, Ga., were appointed a committee by the President to conduct the president-elect, Dr. Bishop, of Washington, to the chair. Before turning over to his successor the gavel and other insignia of office, Dr. Dickson took occasion to thank the Association for its kindness and courtesy to him during his term of office. His little speech was very graceful and sincere, and was received with hearty demonstrations of approval.

Dr. Bishop spoke of the pleasure it afforded him to take the first place in the Association, at the head of the governing body. He said that he deeply appreciated the honor that had been shown him and asked for the hearty co-operation and help of all the members.

Shortly after noon the new President of the Association declared the eighth annual convention of the American Electro-Therapeutic Association closed.

The social side of the meeting was by no means neglected. Dr. Ernest Wende, Health Commissioner of Buffalo, had charge of the local arrangements for the comfort, convenience and entertainment of the visitors, and too much praise cannot be accorded for the manner in which his plans were carried out.

A public reception in honor of the members was held on Tuesday evening, 13th, in Alumni Hall, University of Buffalo building, which was largely attended, many medical men of Buffalo being present.

The duties of chairman were performed by the President of the Association, Dr. Charles Rea Dickson, of Toronto, who made a few remarks, in which he spoke of the fraternal feeling existing between the two great English-speaking nations at the present time.

Dr. Henry R. Hopkins, of Buffalo, a member of the local Committee on Arrangements, spoke of the earnest work of the medical men in this country.

Dr. Robert Newman, of New York, made a brief address, as did Dr. G. Sterling Ryerson, of Toronto.

Rev. O. P. Gifford, D.D., pastor of the Delaware Avenue Baptist Church, in the course of a most amusing address, said that he knew of no other two professions so closely allied as the ministry and medicine. "When you succeed," said he, 'we profit by your success. When you fail, we bury your errors."

On Wednesday afternoon, on adjournment, a special car was in waiting at the door of the place of meeting, and accompanied by Mayor Diehl, a visit was paid to the power-house of the Buffalo Railway Company. Great interest was manifested in the plant, and in the storage batteries, which are the largest in the world. On completion of the visit the members returned to headquarters at Hotel Iroquois by special car and tally-ho coach.

Dr. Lucien Howe entertained the men of the Association in the evening, at the conclusion of the business meeting. A smoker was given at Dr. Howe's home, corner of Delaware Avenue and Huron Street, which was largely attended.

Thursday afternoon was devoted to an excursion and reception, under the direction of the local Committee of Arrangements. The *Huntress* left the foot of Ferry Street at 2.30 o'clock, taking the members of the Association down Niagara River to Navy and Buckhorn Islands, the site of the Pan-American Exhibition, then to the Island Club, where a reception was held, followed by a dinner. The return trip was arranged to get the members back to Buffalo before nine o'clock.

On reaching the city the majority of the members proceeded to Niagara Falls, N.Y., direct, the International Hotel being headquarters.

On Friday morning the view was obtained from the celebrated Steel Observation Tower; the party next took the Niagara Falls Park and River Railroad, crossing by the new steel arch trolley bridge—the greatest steel arch bridge in the world—going first to Chippewa then to Queenston, crossing by ferry to Lewiston, N.Y., and returning to Niagara Falls by Niagara and Lewiston Railroad.

After lunch the members were conducted over the power-house of the Niagara Falls Power Company, by Coleman Sellers, E.D., President and Chief Engineer, who made the visit most interesting and instructive. On returning to the hotel a meeting was held, and Dr. C. R. Dickson was requested to convey to Dr. Sellers the thanks of the Association for his courtesy. A very enjoyable trip was next taken on the *Maid of the Mist*, after which most of the members left for their respective homes. Those who remained visited on Saturday morning Power Station No. 2 of the Niagara Falls Hydraulic Power and Manufacturing Company, and were conducted over it by the chief electrician, who fully explained all the wonderful appliances.

In addition to the many other provisions for the entertainment of their visitors, the Committee on Arrangements provided tally-ho coaches which made tours of Buffalo on Tuesday afternoon and Wednesday morning and afternoon, leaving from the Library building. Members were also invited to enjoy bird's-eye views of the city from the roof of the Guarantee Building, Church Street, the tallest building in Buffalo, and to visit the collections of the Society of the Natural Sciences, Historical Society, and the Gallery of Fine Arts, in the Library Building, in which the meetings were held.

Very handsome badges were prepared for the members and officers by the local committee. For members the badges were of bronze, and for officers, of gold. A buffalo formed the pin, from which depended by a ribbon a triangular pendant, bearing the name of the Association, the date, and the name of the convention city. The ribbon for officers was yellow, that of members red.

A most interesting exhibition of electrical apparatus for diagnostic, therapeutic and radiographic purposes was held in the room adjoining the meeting hall, and was a very popular feature of the meeting. The following manufacturers exhibited: Van Houten & Ten Broeck, New York; Chloride of Silver Dry Cell Battery Company, Baltimore, Md.; Jerome Kidder Manufacturing Company, New York; Edison Manufacturing Company, New York; Waite & Bartlett Company, New York; Dow Electric Assistant Company, Boston, Mass.; American Electro-Neurotone Company, Niagara Falls, N.Y.; Standard Cold Electric Lamp Company, Washington, D.C.; Spencer Lens Company, Buffalo, N.Y.; Detwiler, Biddle

Company, Buffalo, N.Y.; W. J. Shields & Company, New Wilmington, Pa.; Rochester Fluorometer Company, Rochester, N.Y.

The eighth annual meeting was universally conceded the most successful and enjoyable that has been held, and the prospects for the Association were never brighter or more encouraging. Arrangements are already in progress for the Washington meeting.

EXECUTIVE HEALTH OFFICERS' ASSOCIATION MEETING.

THE thirteenth annual meeting of the Association of Executive Health Officers of Ontario commenced in the Railway Committee Room of the House of Commons, Ottawa, 10.30 a.m., September 26th. Amongst those present were the following: Dr. M. McCrimmon, Palermo; Dr. P. H. Bryce, Toronto; Dr. J. J. Cassidy, Toronto; Dr. Hall, Chatham; Dr. W. J. Anderson, Smith's Falls; ex-Ald. Wallace, Ald. Black, Dr. Kitchen. St. George; Prof. Shutt, Ottawa; Dr. Wardlaw, Galt; Mr. Van Buskirk, Stratford; Mr. A. W. Campbell, Toronto; Dr. Fee, Kingston; Dr. Hutchinson, London; Mr. Taylor, Chairman L.B.H., London; Mr. A. McGill, Ottawa; Mr. Mackenzie, Toronto; Dr. Lindsley, President of the American Health Association; Dr. Durgin, Boston. An address of welcome from the city of Ottawa was extended by ex-Ald. Wallace and Dr. Robillard, and was replied to by the President.

The President read his address, which contained amongst other things the following references: "It has come within the experience of every rural practitioner and health officer to deal with outbreaks of disease in some old log cabin, where some poor people with the poor man's blessing, a numerous family, have become infected with contagious disease, such, for instance, as diphtheria or typhoid fever. Remembering the limited air space, the small windows, the absence of means for ventilation, the superstitious fear of the olden time of fresh air in the sick-room, and add to this a dairy cellar, often with decaying organic matter and the decaying logs of rotten foundations, and it is difficult to conceive of any urban conditions more likely to promote severe cases or more fatal results than those described." He also drew attention to the overcrowding in schools of the rural districts, in which contagious diseases were most readily and unknowingly disseminated by school children. He noticed with pleasure the evidence of a great decrease of typhoid deaths in the Province during the past fifteen years. This was due a great deal, he said, to the abolition of town pumps and the substitution of waterworks systems. In reference to hygiene on the farm, which naturally leads up to the problem of healthy cattle, he said that, speaking generally, Canadian cattle are healthy, and probably nowhere on this continent is cattle-breeding so much studied or so generally understood. He thought that the increased wealth of the

country should make it expedient that the farmers should be taught the necessity and how easy and cheap it was to have the sanitary conveniences, such as the introduction of water to the house by windmill or by pumps placed in the kitchen, and for the carrying off of organic matter automatically, to the great comfort and health of all. In some interesting statistics read by Dr. P. H. Bryce at a meeting of the Provincial Board of Health in May last it would appear that local Boards of Health exist in most rural localities; yet their medical health officers are permitted to do sanitary work only when directed by the local Board of Health. Besides the remuneration is low and but few health officers receive a regular salary. But though we have not travelled far in scientific public health work in rural districts, yet we have made a start. I think the trouble is that as an association we have been too modest. Every other association applies to the Government for grants to establish experimental stations, to publish extensive literature, to pay travelling teachers of agriculture and cheesemaking. We ask for nothing and get it. It seems to me that it is high time the attention of the public and the Government should be directed to the need of funds, not only for disseminating a knowledge of sanitation, but for making experiments in discovering the causes of disease."

In the discussion which followed the address Prof. Shutt of the Experimental Farm made reference to the statements in the President's address referring to the poor condition of the wells. He said that the Government were at the present time doing a good work in this matter. A circular had been sent out asking for samples of the water for analysis, and he had received returns from as far as British Columbia.

Dr. Bryce spoke on the necessity of concentrating public work by expert officers.

Dr. Anderson, of Smith's Falls, said the question of wells was a most important one, and in reference to the matter he told how in his district the work had been neglected. Wells had been put down in low, marshy ground for the use of cattle, and packed with manure, which ultimately polluted the water.

Mr. Mackenzie read a report of the Committee upon Disinfection. Dr. Robillard, of Ottawa, Dr. Bryce, of Toronto, and several others took part in the short discussion which followed.

Dr. J. J. Cassidy, of Toronto, read a paper on the "Inspection of Meat for the Local Market," *vide* p. 253 October issue of this journal. A general discussion followed, in which almost every medical man and health officer present took part. The consensus of opinion was in favor of establishing abattoirs in towns so that proper inspection might be carried out.

The afternoon session of the Association commenced in the Railway Committee rooms at half-past 2 o'clock, Dr. M. McCrimmon in the chair. All the medical men and health officers who were present at the opening session were in their places.

The first business of the session was the reading of a paper by Mr. C. Horetzky, Public Works Department of Ontario, on "Treatment of Sewage." He presented the subject in a very masterly way and discussed the straining of sewage by coke filters as used at Reading, Pa. In the discussion which followed Mr. Horetzky answered a number of questions bearing on the matter, and said that he considered this system far superior to that which he recommended to London three years ago. He did not recommend filtration through coal, which is used at Hamilton, and said that nothing better than coke could be utilized for the removal of sludge.

Mr. Van Buskirk, of Stratford, said that he considered the land system could not be beaten for the work, provided that suitable land could be obtained. He did not think that any set rule could be applied, as the different cities required different systems. There was another method of filtration which has not been mentioned, but which has been in use in England for two years. By this system the sewage is run into a filter and kept there for a few hours before being run off.

Ald. Taylor, of London, spoke of the matter as applied to London, and said that he was sorry to see that Mr. Horetzky had changed his opinion in his recommendation of three years ago. A number of systems had been spoken of to-day, but all were put forward by rivals. He believed the McDougall system was an excellent one, but owing to the representations of a number of engineers they were now in a quandary as to the best to use. Mr. Mackenzie and Dr. Bryce also spoke.

Mr. A. McGill, M.A., B.Sc., Inland Revenue Department Laboratory, Ottawa, read a paper on "Local Standards for the Chlorine in Well Waters." The paper was accompanied by maps illustrating the ground formations, and on which Mr. McGill illustrated how chlorine passed from the surface to the ground water. He said that artesian wells were the best undoubtedly, but the cost is a hindrance. There are in Canada half a million wells, and these are mostly all surface wells which are generally found to contain organic impurities. Of course, it would be impossible for the Government to analyze samples from all these wells, but if the different townships were to take the matter up the same end might be arrived at. In the discussion which followed, Prof. Shutt, Mr. Mackenzie and Dr. Bryce spoke. Each of these gentlemen went into the matter thoroughly, as they have found it, and the conclusion was arrived at that almost every locality had its own characteristics, and no rule can be set forth to enable the farmer to decide the quality of the water in his well.

Mr. A. W. Campbell, C.E., Good Roads Department of Ontario, read an interesting paper on "What Influence have Pavements on Public Health?" The paper dealt with pavements from a sanitary point of view. Amongst other things, he said: "Ontario has so recently developed from a wilderness into the home of civilization and culture; our villages have grown so quickly into towns, out of

towns into cities, and the advance of the various sciences has been so rapid, that our people scarcely realize the changed circumstances and the need of carefully directing their energies in meeting the demands of the times. I find that in very small villages even inefficient drainage, cesspools, piggeries, slaughter-houses and impure water supplies are not now tolerated. There is no paving material which possesses every quality desired in a pavement to meet all conditions and uses. The ideal pavement remains to be discovered, but the features, which belong to such an ideal pavement are so numerous and of such varying character as to render the search apparently a hopeless one. The ideal pavement should be cheap, durable, suit all classes of traffic, offer little resistance to traction, give a good footing for horses, be adapted to all grades, have a good appearance, not be pervious to water, be sanitary (that is, non-absorbent), not subject to decay, easily cleaned, not dusty and not noisy. It is the purpose of this paper to deal with the healthfulness of paving in general, and of the sanitary conditions of asphalt, stone blocks, vitrified bricks, cedar blocks and macadam, with respect to absorption, decay, ease of cleaning, dustiness and noise."

Mr. Campbell discussed first the use of cedar blocks, which proved to be not favorable. Macadam and other systems were discussed and their bad points brought out. With regard to absorption, there can be no objection to asphalt, vitrified bricks or stone blocks. Asphalt is impervious to water, while brick and stone pavements are practically perfect so far as absorption is concerned. To be sanitary a pavement should not be dusty, as it carries with it the bacteria of disease, which are part of street filth. To prevent dust, the pavement must be so perfectly cleaned that a practically harmless amount is taken up by the wind, or if perfect cleaning is not possible, dust must be subdued by sprinkling.

Toronto has a reputation of being a clean city, with a well-organized street department, yet even under these favorable conditions a walk or drive down Yonge Street is a very trying experience. Business men in offices are not safe from the attack of the dust, and it embeds itself in clothing and other articles of goods exposed. He spoke of one case where patients were ordered to leave Jarvis Street because of the dust. The streets are swept by hand and machines, and not flushed as in Ottawa and Montreal. Flushing is the only method whereby asphalt can be freed from this insanitary dustiness. Asphalt, however, is hot, and is objectionable in close business streets. Vitrified brick and stone block pavements are not so dusty in hot weather, as the surfaces are less smooth, and assist in retaining in the joints the finer particles of dust. In support of wood blocks as not the worst kind of pavement, he said that if it was considered such an illness-breeder, portions of Toronto should be hotbeds of disease.

Dr. J. J. Cassidy, in the absence of Mr. E. B. Shuttleworth, read his report on "The Influence of Street Pavements on the Occurrence

of Diphtheria." He said that an investigation had recently been held in Toronto, and in the comparison which was made no difference to any extent was shown between block pavements and macadam in causing outbreaks of diphtheria. Observations are being continued, and will be made the subject of a paper later.

The last two papers elicited a short discussion, City Engineer Surtees, of Ottawa, Mr. Mackenzie, Dr. Bryce and Dr. Cassidy taking part.

An evening session was held at the Russell House, at which Dr. P. H. Bryce, Secretary of the Provincial Board of Health, read a paper on "The Duty of the Public in Dealing with Tuberculosis." Dr. Bryce, in opening, gave the expenditure which was made annually on Government and civic charities. If, then, we are to look, he said, to the enlarging of expenditures for further charitable works in the Province, such as we believe to be necessary; if we are going to effectually deal with tuberculosis as we do with other contagious diseases, it will be apparent that the people, as residents of our municipalities, must realize that the work must principally be undertaken directly by themselves, either as individuals or as citizens upon municipal committees. "I feel," he said, "the people feel, that the tuberculized poor can be treated in a sanitarium, located favorably, conducted and managed by the Government, as are the public institutions for the cure of the insane. They must be prepared to supply largely the funds therefor, as was done long ago, when the Legislature authorized an assessment for the maintenance of lunatics. In the meantime, however, there is the fact that the present situation demands from the public, whether in city or country, the undertaking of actual effort for limiting the ravages of tuberculosis. The education of the public is the first step, to realize the true nature of the disease as regards curability.

"The subject," he said "had become a matter of general discussion amongst the people of Ontario. Hundreds of people had been sent to Muskoka this summer with tuberculosis, by their physicians, with no place there for treatment, and they were looked upon almost as lepers. The public can assist in the work of relieving these people in two ways: first, by people being honest with their physician; and, second, by granting money for the establishment of homes of recovery, or sanitariums for consumptives. In every sanitarium I have visited the same remark has been made by the staff, 'Oh! if the doctor would only send the patient early enough we could hope for the best results.' In Toronto hospitals, in 1896, 473 consumptives were treated at an average of fifty days each, or 21,850 days of medical service. In the maintenance of these the public of the city paid some $5,000. As 257 of these died, it is plain most were in the latest stages of the disease. They must be dealt with in a different fashion 'How?' you say. By air cure, or life in the pure country air. The death-rate of Toronto is one consumptive for every two

hundred of the population, or one in every forty families. This means that each church congregation has several consumptives amongst them. It is not meant that churches should establish homes, but they should, with all philanthropic workers, assist in establishing these homes, and thereafter urge all who are in need of assistance to go where they will receive proper care. As health officers and boards of health we may be expected to see that schools and workshops in certain trades be maintained and maintain themselves so that, in a degree, foul air may be lessened. Clearly, then, if in the work to be done in lessening the prevalence of consumption, we, as the supposed skilled exponents of medicine in Ontario (that is, the body politic) are willing to push forward the work, the community must supply the sinews of war." Dr. Bryce, in closing, dealt with the necessity for the Association to interest philanthropic people in the project of homes. He said the people may cry for legislative reforms, and if they cry loud they will get them. And even more important is the exercise of every home agency by which wholesome surroundings, good food and clear air shall be maintained in every dwelling; and amongst our people we need not fear that financial aid will fail us in our efforts to supply homes to which those who, in spite of every effort, have been affected with the disease, may go for rest and final recovery.

An animated discussion followed, in which Dean Carey (Kingston), Dr. Lee (Philadelphia), Dr. J. J. Cassidy, Mr. Mackenzie, and Dr. Probst (Ohio) took part.

The fourth session was held in the Parliament Buildings at 10.30 a.m., September 27th, Dr. M. McCrimmon, President, in the chair. On account of the similarity of the remaining papers to those already read, it was resolved that they be read by title. The papers referred to were, "The Resistance of the Diphtheria Bacillus to Throat Disinfection," by E. B. Shuttleworth, Ph.D., Toronto, and "Some Recent Investigations into Air Infection," by John J. Mackenzie, B.A., Toronto.

The election of officers resulted as follows: President, Dr. J. J. Cassidy, Toronto; Vice-President, Dr. Hutchinson, London; Council—Mr Van Buskirk, Stratford; Dr. Fee, Kingston; Dr. Robillard, Ottawa; Dr. Wardlaw, Galt; Dr. Hall, Chatham; Dr. McCrimmon, Palermo; Dr. Sheard, Toronto; Secretary-Treasurer, Mr. J. J. Mackenzie, Toronto.

At a previous meeting it was decided to investigate the sanitary condition of pavements, and the President appointed Dr. McGill, Mr. Van Buskirk, Mr. E. B. Shuttleworth, Mr. Mackenzie, Dr. Bryce and Mr. A. W. Campbell to look into the matter and report later.

Dr. J. J. Cassidy, the President-elect, in accepting the office for the ensuing year, complimented the past president, Dr. McCrimmon, on his excellent work while in office, and closed by moving a vote of thanks, which was carried unanimously.

Dr. McCrimmon, in reply, said that the meeting in Ottawa had been the most successful and most instructive in years, and he

expressed the hope that next year the attendance and quality of the business would be equally as good. He paid a high compliment to Mr. J. J. Mackenzie, of Toronto, the hard-working Secretary, and said it was due to him largely that the meeting was such a success.

London and Kingston were suggested as the next places of meeting, but the matter was left with the Executive. J. J. C.

RESOLUTION OF THE CANADIAN MEDICAL ASSOCIATION.

WHEREAS a revised edition of the "British Pharmacopœia" has been issued containing numerous and important changes, and whereas uncertainty exists as to the date when the "British Pharmacopœia, 1898," is to be considered in force;

Resolved,—That the Canadian Medical Association in annual meeting assembled recommend that October 1st, 1898, be taken as the date, on and after which, in the absence of instructions otherwise, physicians' prescriptions should be compounded with the preparations of the "British Pharmacopœia" of 1898.

WE are pleased to see that Dr. John Caven has sufficiently recuperated to resume his lectures and work at the University.

DR. GEORGE ACHESON, of Galt, Major of the 29th Battalion, has just received orders from Lieut.-Col. D. H. Holmes, D.O.C., of London, to take over from Lieut.-Col. Cowan, retired, the command of the 29th Battalion. Dr. Acheson has been connected with Canadian military life for twenty-two years. He joined the Toronto University company of the Queen's Own Rifles in 1876, and served in the ranks for five years. He then took commission in command of the University company, and held it till 1887, when he retired. In March, 1895, he was appointed Major in the 29th Battalion, and has held that position to the present.

DR. W. E. HAMILL who for some years has conducted a medical brokerage business under the name of The Canadian Medical Practice and Partnership Office, has changed the name to that of The Canadian Medical Exchange Office. The doctor wishes us to state that he always has fifteen to thirty buyers ready to investigate any practice offered and purchase the same if it suit them. Every prospective buyer is bound in writing as to secrecy and honorable dealings and to not offer opposition if they do not buy. Every safeguard possible is thrown around a vendor to prevent any piracy whatever, and physicians who contemplate selling out should make use of his Office to prevent publicity and secure a successor in the quickest and quietest manner possible.

REPORT OF DEATHS FROM CONTAGIOUS DISEASES IN ONTARIO FOR THE MONTHS OF AUGUST AND SEPTEMBER, 1898.

PREPARED BY P. H. BRYCE, M.A., M.D., DEPUTY REGISTRAR-GENERAL.

AUGUST, 1898.

Total Population Reporting.	Total Municipalities Reporting.	Total Deaths Reported.	Scarlatina.	Rate per 1,000 per Annum.	Diphtheria.	Rate per 1,000 per Annum.	Measles.	Rate per 1,000 per Annum.	Whooping Cough.	Rate per 1,000 per Annum.	Typhoid.	Rate per 1,000 per Annum.	Tuberculosis.	Rate per 1,000 per Annum.
2,183,168	694	230	10	0.05	16	0.09	6	0.03	12	0.06	34	0.2	152	0.8
97%	93%													

SEPTEMBER, 1898.

2,163,151	677	250	11	0.06	33	0.18	2	0.01	13	0.07	41	0.2	147	0.8
95%	93%													

Population of Province 2,263,492

Municipalities of Province 745

The Canadian Journal of Medicine and Surgery

J. J. CASSIDY, M.D.,
EDITOR,
69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.Lond.,
BUSINESS MANAGER,
145 COLLEGE STREET, TORONTO.

Surgery—BRUCE L. RIORDAN, M.D.,C.M., McGill University; M.D. University of Toronto; Surgeon Toronto General Hospital; Surgeon Grand Trunk R.R.; Consulting Surgeon Toronto Home for Incurables; Pension Examiner United States Government, and F. N. G. STARR, M.B., Toronto, Lecturer and Demonstrator in Anatomy, Toronto University; Surgeon to the Out-Door Department Toronto General Hospital and Hospital for Sick Children.

Orthopedic Surgery—B. E. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

Oral Surgery—E. H. Adams, M.D., D.D.S., Toronto.

Surgical Pathology—T. H. MANLEY, M.D., New York, Professor of Surgery, New York School of Clinical Medicine, New York, etc., etc.

Medicine—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and W. J. WILSON, M.D., Toronto, Physician Toronto Western Hospital.

Gynæcology and Obstetrics—GEO. T. MCKEOUGH, M.D., M.R.C.S. Eng., Chatham, Ont.; and J. H. LOWE, M.D., Toronto.

Medical Jurisprudence—W. A. YOUNG, M.D., L.R.C.P. Lond., Eng., Toronto.

Mental Diseases—EZRA H. STAFFORD, M.D., Toronto, Resident Physician, Toronto Asylum for the Insane.

Public Health and Hygiene—J. J. CASSIDY, M.D., Toronto, Member Ontario Provincial Board of Health; Consulting Surgeon, Toronto General Hospital; and E. H. ADAMS, M.D., Toronto.

Pharmacology and Therapeutics—A. J. HARRINGTON, M.D., M.R.C.S. Eng., Toronto.

Physiology—A. B. EADIE, M.D., Toronto, Professor of Physiology, Woman's Medical College, Toronto.

Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P. Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THORBURN, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otology—J. M. MACCALLUM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited.

Advertisements, to insure insertion in the issue of any month, should be sent not later than the fifteenth of the preceding month.

VOL. IV. TORONTO, NOVEMBER, 1898. NO. 5.

Editorials.

PHOTOTHERAPY.

IN describing the treatment of small-pox, Watson, by way of a comment on the methods in vogue a few centuries ago, mentions that "John, of Gaddesden, who flourished in the fourteenth century surrounded the small-pox patient with red curtains, red walls, red furniture of all kinds; everything he saw was to be red, for in that color there was, John pretended, a peculiar virtue."

Dr. Finsen, of Copenhagen, who has devoted special attention to the treatment of small-pox after the manner followed by John of Gaddesden, observes in *La Presse Medicale* that by excluding

certain rays of light a small-pox patient is placed in a condition to more powerfully resist the disease. He is careful to remark, however, that his method is not a full treatment of small-pox, but only a topical treatment of the variolous eruption. He claims that the pitting and scarring of the patient's face and hands can be prevented if red curtains are used in the sick-chamber. The knowledge of the hurtful influence of light in the evolution of the variolous pustules was known, he says, in ancient times. Fouquet, of Montpellier, relates that in the eighteenth century small-pox patients were covered with scarlet cloth, and were put in beds surrounded with red curtains, just the same as they are now treated in Japan. Dr. Capitanowitz, of Alexandria, mentions that this custom was practised very anciently in Roumania, and Dr. Cassabatie, of the French naval service, three years ago saw small-pox patients in Tonkin, treated by means of the exclusion of light. Among the numerous methods of treatment used to prevent pitting in small-pox, the exclusion of solar light passed unnoticed by many observers, and may appear as useless as the rest. One fact, however, makes it at least probable that certain rays of light do exert an influence in the evolution of the pustules, and it is, that the hands and the face, which are uncovered, show the deepest and most confluent scars. Besides the greater number of methods of treatment used to prevent pitting, act by covering the skin from the light, whether one uses tincture of iodine, nitrate of silver or compresses. Dr. Finsen gives the clinical results of his theory. In July, 1893, he proposed to treat small-pox patients in rooms into which light would not enter, except after passing through red curtains. This method was tried at Bergen, Norway, by Drs. Lindholm and Swendsen, who treated eight patients, four of whom had not been vaccinated. "The clinical histories of the patients treated by this method," said Dr. Swendsen, "showed the following anomalies: the suppurative stage, the most painful and most dangerous in small-pox, did not appear; no elevation of temperature and no œdema were produced; the patients passed into convalescence immediately after the vesicular stage, which seemed somewhat prolonged; the hideous scars also were absent." Two of Dr. Swendsen's patients were exposed to the light of day after the complete desiccation of the vesicles on the face. Some pustules, still active, which remained on the backs of the hands, became irritated by this influence, began to suppurate and left deep scars; the epidermis was intact in all other parts of the body.

In January, 1894, Dr. Feilberg, chief physician of the small-pox hospital, Copenhagen, treated by red light eleven patients, eight of whom had the disease in so bad a form that a lengthy suppurative stage might have been expected. In none of the cases did the suppurative fever appear, and all these patients left the hospital unscarred. One of the patients was exposed to the light while some of the vesicles, which were not yet dry, remained on his ear; these vesicles immediately began to suppurate. A child in whom this treatment was begun at an advanced period of the disease had a severe suppuration, but all the late-appearing pustules were arrested in their evolution and dried up. Similar results are reported by Dr. Beackert, of Gottenburg, Sweden; Drs. Krohn and Myzius, Denmark; Dr. J. W. Moore, Dublin; Dr. Perronet, Paris, and Dr. Abel, Bergen. The last-mentioned observer says: "Dr. Finsen's treatment, if carefully observed from the first appearance of small-pox, so powerfully modifies the course of the disease that suppuration and its sequels may be prevented."

To put this treatment into practice is relatively an easy task. It is unnecessary that the glasses and the curtains should be of a dark red tint. A light red color will be more agreeable to the patients, and will facilitate the work of the nurses. However, all lamps brought near the patients ought to be provided with red globes. Patients should never be exposed, even for an instant, to the light of day until the vesicles are completely dried. In this expression of his opinions, Dr. Finsen confines himself to clinical results. In an article to be brought out later on, he will give the reasons which have led him to seek the influence of light in treating certain diseases, as well as the biological experiments which have enabled him to determine the specific action of certain rays of the spectrum on organisms. Phototherapy has also been used in the treatment of measles by Dr. Chatiniere, of Saint Mandé, France, who reports three cases treated by this method last July. The first patient recovered, took a bath and went out on the eighth day. The second patient was able to go out on the sixth day, as was also the third patient. Dr. Chatiniere thinks that his cases demonstrate the effect of suppressing normal rays of light by the interposition of red curtains. He considers that the explanation of the cutaneous phenomena observed in measles when so treated, is similar to what has been observed in variola, and he thinks that diseases with cutaneous phenomena may be modified in their duration and form by this harmless intervention. He prevents

access of light by the use of red curtains over any opening in the room through which a ray of light might pass. He also gives orders that no artificial light is to be employed in the sick-room, a photographic lantern being used when necessary.

In Ontario, variola, owing to the far-reaching effects of hygiene, is now an extremely rare disease, so much so, indeed, that to obtain a clinical knowledge of it, the younger physicians of this province will have to go abroad. Owing to chance, however, it may be introduced unexpectedly into some of our towns. Should such be the case, it would be interesting to learn that Dr. Finsen's treatment has been employed with results beneficial to the facial expression of the sufferers.

On the list of causes of death in Ontario in 1896, measles stood fifteenth with thirty-six deaths. It is considered a rather trivial disease among the people, and often receives very little medical treatment. Many practitioners advise that draughts of air be excluded from the sick-room for fear of aggravating the accompanying bronchitis, and the windows in the sick-room are generally darkened to relieve irritability of the conjunctiva. If by advising the use of red curtains, we so shorten an attack of measles that the patient can be sent out in from six to eight days, we certainly deserve the gratitude of the family. We may help also by establishing a speedy convalescence, to lessen the remote results of measles, which sometimes leaves dangerous sequels in its wake, and even prepares the tissues of the body for the ultimate development of tuberculosis. J. J. C.

PROFESSOR PETERS AND HIS CRITIC.

Professor Peters, of Toronto, gave a demonstration of a "New and Original Method of Making Casts" before the Surgical section of the British Medical Association at Edinburgh, July, 1898. The working of the apparatus was also shown, by request of the London surgeons, in Dr. Sims Woodhead's laboratory, London, and all who witnessed these performances were unanimous in pronouncing this method both original in design and effective in the results obtained. His article descriptive of the process also appears in the *British Medical Journal*, September 3rd, 1898. Professor Peters states that after considerable experimenting he elaborated the apparatus, which he describes. It consists of (1) a jacketed tin pail to hold melted paraffin, hot water being placed

in the outer pail to prevent the paraffin from cooling and solidifying, the paraffin being delivered, when required, through a rubber tube, also jacketed with hot water and fitted with an adjustable brass nozzle; (2) a pail to hold iced water, also provided with rubber tubing and a brass nozzle; (3) an air-pump to deliver air by a Y rubber connection to either the paraffin delivery tube or the iced-water tube, or both of them, thereby causing a spray. The air-pump may be driven by a small electric motor.

Briefly, it may be stated that the process consists in spraying melted paraffin over the whole surface, cooling it by spraying ice-cold water at the same time, and finally strengthening the mould with plaster-of-paris and removing it in as many sections as the nature of the subject calls for. Two illustrations are given with the article, in order to show the perfection of the work. One is a cast of a guinea-pig with intestines exposed and partially distended with air in which there is an entire absence of evidence of compression. The second is a cast of a hand, showing an unusual minuteness of detail. In these two subjects, Professor Peters contends that one may see the delicacy of the molten paraffin in adapting itself to minute variations and the absolute absence of the compressing effects, which are so noticeable when plaster or heavy materials are used in immediate contact with the subject.

In the next number of the *British Medical Journal*, September 10th, 1898, Mr. Lawson Tait, in a letter which bristles with egotism from the initial "I am sorry," to the final "I am, etc.," proceeds to disabuse the mind of Professor Peters of the idea that his process of making casts by means of paraffin is either new or original. Mr. Tait explains that he "invented the process about the year 1864; that he did all that Dr. Peters has done and more, taking life-sized casts of the living head and bust." His "apparatus consisted of melted paraffin, a rough painter's brush, a sponge and some iced water."

It does not appear from a perusal of Professor Peters' article that he claims originality in using paraffin for making casts. Perhaps, if all were known, it would be difficult for Mr. Tait to prove priority in that matter. Had Mr. Tait fully read the article he criticises, he should have seen that Dr. Peters mentions his method of dividing the mould in taking a cast of the living head. As a matter of fact, during the meeting in Edinburgh the inventor of the process demonstrated its use by casting, among other subjects,

the "living" heads of four well-known members of the Association. We publish as an illustration of the capabilities of Prof. Peters' process a reproduction of a cast of the head and bust of a well-known member of the medical profession in this city. The head was cast separately, the eyes of course being "carved" in afterwards Then the clothing was cast, and the head "fitted" to the bust at the neck. Prof. Peters makes no claims whatever to being a sculptor, but it will probably be admitted by all, that the "likeness" at

least in this case is such as no sculptor would need to be ashamed of. Dr. Peters' claim to novelty and originality in the process of taking casts with paraffin rests on his method of using "a spray of melted paraffin, kept liquid by an encircling hot-water tube, in order to produce a thin layer one-sixteenth of an inch in thickness on the surface of the subject, following this up with a cold-water spray; or, after the preliminary layer of paraffin has been put on, the two sprays of melted paraffin and cold water may be thrown on at the same time and at the same point. The convergence of the two

sprays produces a most surprising effect. The instant a particle of paraffin touches a particle of cold water, the former, of course, becomes solid, and a sort of spongy tissue is formed with startling rapidity from droplets of water which have become imprisoned in the cancellous spaces of the paraffin. The result is that not only does the cold water applied as a spray greatly facilitate the solidifying of the paraffin, but it enormously increases the speed with which the mould is thickened. This process is continued until the mould, over its whole surface, has attained a thickness of three-eighths to half an inch, when the paraffin spray is stopped and the iced water continued for a few moments until the whole surface is quite firm."

The mould is then strengthened with a liberal coating of plaster-of-paris and the threads cut out, so as to divide the mould into sections. As soon as the plaster has set the moulds are removed. In making the cast the different sections are fitted together, the line of junction smeared with plaster cream, and without any preparation of the surface of the moulds, such as oiling, the plaster cream is poured into the hollow mould in the ordinary way.

It is quite true that, as Mr. Tait says, casts can be made by using melted paraffin with a painter's brush, a sponge, and some iced water. The process of taking casts has, however, been improved since 1864, the simpler being discarded for the more complex apparatus, in an effort to obtain greater artistic perfection of detail. Professor Peters, who has devoted a good deal of time to this branch of art during the past six or seven years, has frequently had occasion to observe the great delicacy, truth and beauty of casts obtained by the use of the apparatus invented and described by him, and naturally prefers it to the somewhat crude method eulogized by Mr. Tait. J. J. C.

THE PREVENTION OF TUBERCULOSIS.

We hope the idea of to-day (a hospital for consumptives in the immediate vicinity of Toronto) will become speedily a reality. Surely such a hospital would prove a wondrous blessing, especially to the poor. We notice that old Edinburgh has awakened to its need of a similar institution, several articles having recently appeared in *The Scotsman* advocating the scheme, and we believe some of the preliminary arrangements for its advancement have been completed. But while we dream of plans for the future, the

dread disease is prevalent in our midst, and it has been proven to be capable of being conveyed from person to person, so the immediate protection of the public health demands that measures should be taken to prevent, if possible, the further spread of this disease. It gives us pleasure to learn that at a recent meeting of the Toronto Medical Society, after a paper had been read by Dr. W. J. Wilson, and which we report in this number, a committee was appointed to look into the question and see what measures had better be taken "as a means of protection to the public." We urge upon this committee to act quickly, and, if necessary, to get the required legislation to have tuberculosis put upon the list of contagious diseases which must be reported by the attendant physician to the local medical health officer.

If the patient cannot be removed to a hospital or place of isolation, at least some form of medical inspection could be arranged, and such means as disinfection and cremation of the sputa, clothing and bed linen insisted upon. Many medical men know of instances where tuberculosis has manifested itself in a member of a family, otherwise absolutely free from tubercular taint or heredity, which case could not be attributed to other causes than sleeping in a room which it was found had sheltered a similar case of perhaps fatal termination. Another way of spreading this disease, is by allowing work such as garment making or ladies' tailoring to be done by the sufferers, or, as in cities like New York where the "sweat-shop" system prevails, the garments are made in rooms crowded to suffocation and reeking with disease.

It has been tersely said, "Consumption follows the cow." While we believe that an inspection of the dairies is carried on in this city, would it not be wise to go a step backward, so to speak, and have the cows themselves thoroughly examined, so that the medical inspector could satisfy himself that the animals were free from tuberculosis ere they are allowed to contribute any milk to the general supply. The tuberculin test, as enacted by our Local Legislature, was indeed a step in advance. Why was the law so soon annulled? Are the "lowing herds" to be let "wind slowly o'er the lea," affording poetic thoughts to the rhymer, putting money in the pocket of the dairyman, and spreading disease to those who drink their milk? By all means let the "tuberculin test" be put into force again.

We believe that milk should be examined (as it is), not only to ascertain the amount of butter fat, but also to find if any bacilli

tuberculosis be present. We think that all persons in purchasing a cow should first insist upon receiving from the seller a certificate showing that the animal had been subjected to the tuberculin test. A very good suggestion made in this connection by Dr. Wilson was, that the Government enact a measure whereby every veterinary surgeon when called to attend a cow found to be tuberculous shall have at once to notify the medical health officer for that municipality of the fact. We await with great interest the work of the committee above referred to. The medical fraternity of Toronto have awakened to the dangers and necessities of the hour, and, let us hope, soon an organized campaign may wage warfare against the "white plague"—Tuberculosis. W. A. Y.

TORONTO UNIVERSITY SENATE ELECTIONS.

THE results of the recent elections, as far as the Medical Faculty is concerned, are that Drs. J. E. Graham, A. H. Wright, W. H. B. Aikins and I. H. Cameron are again elected, the actual number of ballots cast in favor of each being as follows:

Dr. J. E. Graham, 740.

Dr. I. H. Cameron, 505.

Dr. A. H. Wright, 699.

Dr. W. H. B. Aikins, 528.

Dr. James M. MacCallum followed with 481 supporters. It might better be stated for the information of quite a large number, who labored under a misapprehension previous to signing their ballot papers, that the MacCallum who was defeated by a small number of votes, was not A. B. Macallum, Professor of Physiology (and who was elected in Arts), but Jas. M. MacCallum, Professor of Therapeutics; and also that the Aikins who was elected was not Dr. Henry Wilberforce Aikins, associate Professor of Anatomy in the Medical Faculty, and son of the late Dean, W. T. Aikins, but his cousin, W. H. B. Aikins, editor of the *Canadian Medical Review*, and who is not identified at all with the Faculty in Medicine.

We take pleasure in reprinting verbatim an editorial from the October *Canadian Practitioner*—Dr. Adam H. Wright, editor—an expression of "loyalty to colleagues" (?) and desire for "harmony in the Faculty" (?); and *the first and only* "bickering in public" in this Senate election:

"We publish in this issue the results of the recent elections for the Senate of the University of Toronto. While we are pleased with the returns in medicine, we have to regret that the unfortunate split in the medical faculty should again have been exposed to public view. Extreme partyism in a medical faculty is generally conceded to be bad. The question naturally arises—who are responsible for this deplorable family fight? We can answer the question somewhat briefly. The friends of Drs. Reeve, Cameron, and A. B. Macallum, who framed a ticket in 1892 for the purpose of defeating Drs. McFarlane and Wright in the Senate election at that time, and with the expressed intention of injuring in divers ways others of their colleagues, are directly responsible for the most lamentable contest that has ever occurred in connection with this faculty.

"We had hoped that the extreme bitterness was dying out, and that the expressions of 'loyalty to colleagues' and 'harmony in the faculty,' which have greeted us in recent years, were not a hollow mockery. We had supposed that there was a general feeling that our bickering in public should cease, and had expected that the old members, Drs. Graham, Cameron, Aikins and Wright, would be unopposed. Such, in fact, appeared to be the general opinion. Some of the extremists of a certain party, however, were determined not to allow this, and secretly organized, with the result that the nomination of Dr. Jas. M. MacCallum was put in at the last moment, and at the same time letters were sent broadcast among the graduates asking them to 'plump' for Drs Cameron and MacCallum. The friends of Drs. Graham and Wright promptly accepted this challenge, and at the same time worked for Dr. Aikins, who has always been a steadfast supporter of their party in the Senate.

"We do not propose, now, to offer any opinions as to the merits of the two parties; we wish simply to state facts. In the two wretched contests of '92 and '98 one party was aggressive, while the other acted in self-defence, having at the same time a fixed conviction that its views in relation to University matters were correct. We are very glad to learn that many men belonging to both parties—probably a large majority—are heartily tired of this internecine warfare; and we sincerely hope that, in the near future, peace and harmony will exist in a faculty which should show no divisions in connection with the general policy which should prevail among the governors of our Provincial University."

W. A. Y.

"A METHOD OF INTRODUCING AND HASTENING PROFESSIONAL DEGRADATION."

One must thank the *Philadelphia Medical Journal* for suggesting such an appropriate title with which to designate the sin of paying commissions for patients. It appears that in the United States this is a growing evil; in this country, too, from time to time, one hears of some professional (?) brother who pays a commission to some general practitioner because the one has sent the other a patient from whom he has been able to collect a fat fee. Truly, this is bringing down our professional standing to the lowest possible business basis. For is it not this very thing that we condemn when it secures a franchise for a large corporation, or gets a paving contract for the worst kind of pavement? The result in municipal business has been to make in the public mind the term "alderman" synonymous almost with "corruptionist." There is such an undercurrent of feeling in this direction that many of our best business men refuse to seek municipal honors because of the associations. If this sort of thing which is creeping into our profession ever gets its legs and is allowed to walk, our standing as a profession is gone, and in the public mind the term "specialist" will become a synonym for "quack." Naturally, under such circumstances, the specialist who will pay the largest commissions will get the most patients, irrespective of merit. We may then expect to see, when the would-be brilliant surgeon sends out his annual circular, a foot-note to the effect that on patients sent during the first three months a commission of fifty per cent. will be allowed, the amount of the commission gradually reducing according to the delay upon the part of the general practitioner in sending his grist to the mill. Truly such would be a sad state of affairs, and one could look with certainty for an increased mortality. F. N. G. S.

TYPEWRITTEN PRESCRIPTIONS.

We notice in our French and English exchanges that some attention is being paid to the use of typewriting machines by physicians in Europe. Mr. Labouchere, editor of *Truth*, has, in fact, organized quite a press campaign in favor of the view that physicians should be obliged to typograph their prescriptions. For one reason or

another the use of the typograph has become popular with physicians in this country in preparing their ordinary correspondence, and among some it may be also used when writing prescriptions.

A prominent American firm has manufactured a special typograph suitable for prescription writing, with all the special signs, figures, etc., which are required. Encouraged by the demand for this machine in America, this firm has also turned out typographs suitable for physicians in the different countries of the world. By the aid of a typograph a physician can write his prescription in a neat, legible manner, without fear of being misunderstood and with the certainty that his own responsibility will be protected. It is also a matter of some little importance to gain time while increasing safety. J. J. C.

UNIVERSITY MEDICAL FACULTY.

THE introductory lecture of the Medical Faculty of the University of Toronto was delivered on October 3rd by Prof. J. M. MacCallum. The subject chosen was "The Doctor in Literature and Art," and the theatre of the Biological Department was crowded to its utmost capacity by an appreciative audience. Appropriate reference was made to the "Religio Medici" of Sir Thomas Browne, to Burton's "Anatomy of Melancholy," to Smollett, Goldsmith, Keats, the two Hunters, Oliver Wendell Holmes, and the medical creations of Dickens and Ian Maclaren. The lecture was interspersed with lantern-slides illustrative of these authors, and reproducing some of the famous medical scenes of Cruickshanks, Dickens, Hogarth, Rembrandt and the younger Teniers. The object which the lecturer of the evening kept in view throughout was to impress the students with the fact that a too exclusive attention to professional subjects was not desirable, and that the adjacent fields of literature and art were appropriate recreation grounds conducive to their full development as citizens and members of society. W. A. Y.

OUR DECEMBER NUMBER.

ILLUSTRATED magazines are numberless, they are the fashion of the time and a source of unending pleasure to the reader.

So far THE CANADIAN JOURNAL OF MEDICINE AND SURGERY is the only medical journal in Canada that has devoted much attention to illustration.

Feeling our way at first we soon reaped a rich reward in the many letters of thanks from our subscribers.

Ever eager to retain the good opinion of our readers, we have decided to add to our December number a bit of brightness to celebrate the Yule-tide—not a garland of gay holly berries entwined with coquettish mistletoe, but a quiet sober tribute as becometh a grave medical journal; only a few pictures, perhaps a dozen and six, of the beauty spots in and around Toronto—just a small digression from our usual beaten path, a moment's pause here and there in our medical lore, a moment in which we may forget to scan the "second-hand," count the pulse and take the temperature of mankind. We hope our efforts to please the eye will be appreciated by our many subscribers, foreign, Canadian and medical men now scattered far and near, who claim as their birth-place, or the home of their *Alma Mater* this "Queen City of the West," the fairest flower in the garden of cities that bloom in "Our Lady of the Sunshine."

W. A. Y.

ONTARIO MEDICAL LIBRARY.

THE following incomplete list will give the profession some idea of of the works to be found in the library:

Weekly journals regularly received: British and Foreign—*La Semaine Medicale, Deutsche Medical Wochenschrift, British Medical Journal, Lancet.* United States—*Medical Record,* New York; *Medical News,* New York; *New York Medical Journal*; *Boston Medical and Surgical Journal.*

Monthly and semi-monthly: British—*Edinburgh Medical Journal.* United States—*American Journal of Obstetrics, Archives of Pediatrics, American Journal Medical Sciences, Alienist and Neurologist, American Journal of Insanity, American Journal of Physiology, Annals of Surgery, Charlotte Medical and Surgical Journal, Northwestern Lancet, Index Medicus.*

Besides fairly complete files of *Birmingham Medical Review, Glasgow Medical Journal, International Magazine, International Journal of Surgery, Brooklyn Medical Journal,* and others.

Reports and transactions, such as "Johns Hopkins Bulletins and Reports"; "Transactions of Association American Physicians"; "Transactions of American Orthopœdic Association"; "Transactions of Obstetrical Society, Edinburgh"; "Guy's Hospital Reports"; "Transactions of London Pathological Society."

Reference handbooks, as "Sajous' Medical Annual"; "Medical Annual"; "International Clinics," etc.

Systems of medicine and surgery, like Treves, Wyeth, Gross Holmes, Ericson, Ashurst, Pepper, Fagge, Loomis-Thompson, Albutt, Osler and "Twentieth Century Practice of Medicine."

Up-to-date editions of works on special subjects, as Kelly's "Operative Gynæcology"; Hermann's "Diseases of Women"; Albutt and Playfair's "Gynæcology"; Pozzi's "Gynæcology"; Holt's "Diseases of Children"; "Rotch's "Pediatrics"; Bosworth on "Nose and Throat"; Thompson's "Dietetics"; Foster's "Therapeutics"; Phelps on "Traumatic Injuries to the Brain"; Fowler and Godlee on "Diseases of the Lungs"; Maylard's "Surgery of Alimentary Canal"; Lawson Tait's "Perineal Operations"; Creig-Smith's "Abdominal Surgery"; Jacobson's "Surgical Operations": Allingham on "Diseases of the Rectum"; Deaver on "Appendicitis"; Hawkins on "Diseases of Vermiform Appendix"; Osler on "Angina Pectoris"; Osler on "Diagnosis of Abdominal Tumors"; Nsunyn on "Cholelithiasis"; Zeigler on "Pathological Anatomy"; Thoma on "General Pathology"; Balfour on "Senile Heart"; and Keating on "Diseases of Children."

HE HAS RETURNED TO HIS FIRST LOVE.

Dr. W. H. B. Aikins has sold out the *Canadian Medical Review* to Drs. Adam Wright and E. E. King, the publishers of the *Canadian Practitioner*. Hereafter the amalgamated journals will bear the name of the *Canadian Practitioner and Review*.

GIVE US YER MIT, SWIPSEY.

The average politician is not "in it" with at least one of the members of the late triune ticket. How his hand must be *a-i-k-i-n* after its frequent applications of the Masonic grip. A grip for a vote. Don't blush, dear little man, there is no "money in it."

Dr. Roddick, Montreal, at a meeting of physicians held at Toronto, October 22nd, explained his method of obtaining Dominion registration for Canadian practitioners. His opinions received the favorable consideration of the meeting. The subject will be discussed in a later issue.

The Physician's Library.

BOOK REVIEWS.

A Manual of Legal Medicine, for the use of Practitioners and Students of Medicine and Law. By JUSTIN HEROLD, A.M., M.D., formerly Coroners' Physician of New York City and County; late House Physician and Surgeon of St. Vincent's Hospital, New York City; member of the New York County Medical Association, County Medical Society, Medico-Legal Society, Society of Medical Jurisprudence, New York Academy of Medicine and German Medical Society of the City of New York. Philadelphia: J. B. Lippincott Co. London: 6 Henrietta Street, Covent Garden. Canada: Chas. Roberts, 593A Cadieux Street, Montreal. 1898.

That the large majority of the works already published on medical jurisprudence are too bulky and lengthy to be practical is a fact, so that Dr. Herold, in presenting to the profession what he modestly calls his "Manual of Legal Medicine," has compiled a book which will be found, not only useful to all who take an interest in matters of legal medicine, but full of interest and instruction to medical and law students. Herold's "Legal Medicine" comprises not only the actual practice of the medical jurists of the day, but is full of cases of interest met with personally by the writer. In the latter point the book excels, as there are too many books for sale which are in every instance simply a reflection, and to a large extent a copy, of a former one by a different author. It must be admitted that the practitioner of the present day is woefully ignorant on matters of medical jurisprudence, and very often is placed in a most disagreeable predicament on that account. A work of this kind will be the means of presenting to the physician, who has had this important branch of his medical education perhaps neglected, the means of conveying to him in a short, terse and simple manner, the principal cases which may crop up in practice and in which he may be able to serve his country or Government in a manner which will reflect credit upon both him and his Alma Mater, instead of, as in too many instances, the reverse. Part I. of this work takes up Toxicology, and treats of the administration, effects, elimination and antagonism of most of those drugs known as poisons. Chapter ii. treats of evidences of poisoning in the living, and chapters iii. and iv. take up the rules to be observed in poison cases, and a classification of poisons. From chapters v. to xvi. the different poisons are treated separately. In each one the symptoms, treatment and *post-mortem* appearances are dealt with in a clear, concise manner. Part II. deals with Forensic Medicine proper, treating first with signs of death, medico-legal autopsies, presumption of death and survivorship, personal identity, examination of blood stains, the medico-legal consideration of wounds, gunshot wounds, burns and scalds, etc., etc., finishing up with such matters of interest to the medical jurist as rape, impotence, legitimacy and life insurance. The chapter on Medico-Legal Autopsies is most complete. That part treating on personal identity includes a synopsis of the Bertillon system of identifying criminals and is thoroughly interesting. The largest chapter in the book is that which considers blood stains and their medico-legal importance in cases of homicide. The book is replete with information in every branch of legal medicine.

Sajous' Annual and Analytical Cyclopedia of Practical Medicine. Volume II. "Bromide of Ethyl of Diphtheria." The F. A. Davis Company, Phila., Pa.

We notice in this volume several important articles by well-known specialists. Among others, the article on "Cholelithiasis," by Professor Graham, Toronto; that on "Cirrhosis of the Liver," by Professor Adami, Montreal, and an

article on "Cholera Infantum," by Dr. Blackader, Montreal, will be peculiarly interesting to Canadian readers.

Professor Graham's article is admirable in its completeness, and is rendered yet more instructive by some appropriate illustrations. In the treatment of biliary colic he states that "The most effective remedy is a hypodermic of $\frac{1}{4}$ or $\frac{1}{3}$ grain of morphine with $\frac{1}{120}$ grain of atropine. Hot applications applied locally afford some relief." Immersion of the patient in a hot bath has in our experience caused the passage of the calculus and the sudden disappearance of pain.

Professor Adami's article is particularly full when the pathological anatomy of the liver is described. Under the head of "Portal Cirrhosis," ascites and œdema of the feet are given as symptoms, but œdema of the scrotum and penis is not mentioned. Under the head of treatment, avoidance of alcohol is indicated. In view of the futility of ordinary medical treatment this seems insufficient. The patient should be told that abstinence from alcohol is the important feature in the treatment of his disease. Calomel and salines cannot do much good. Repeated tapping occasionally proves curative, or, at least, adds to the patient's comfort.

In the article on "Cholera Infantum," by Professor Blackader, Montreal, a good point is made in the description of the pathology of this disease, when he says that "There are few changes found after death, either in the intestinal canal or in any of the organs. The only lesion present may often be a desquamative catarrh of the gastro-intestinal tract." Fatal cases are sometimes called enteritis or gastro-enteritis. The indiscriminate use of the terms "cholera infantum" and "enteritis" often renders it impossible to determine the form of disease to which a physician refers.

The article on "Diphtheria" by Drs. Northrup and Bovaird shows the extreme simplification achieved in the treatment of that disease. With the advent of antitoxin, most of the remedies for diphtheria have been discarded. The tincture of the chloride of iron, however, still deserves attention in the treatment of pharyngeal diphtheria. As these writers cogently put it: "At the present time, apart from the general treatment, diet, rest, etc., after giving antitoxin, we confine our efforts to the careful cleansing of the nose and throat and the use of stimulants." Similar views were expressed in the CANADIAN JOURNAL OF MEDICINE AND SURGERY, September, 1898, p. 136 and p. 197.

In the article on "Cimicifuga," no mention is made of the use of the fluid extract of cimicifuga in doses of thirty drops a day in the treatment of tinnitus aurium. This medicine clears the voice, which has become husky by relaxation of the faucial or lingual tonsil or the glands in the vicinity of the larynx. It removes congestion of these parts and the voice becomes clear again. Its action may also extend to the Eustachian tubes, removing congestion of these parts and proving curative in recent cases of tinnitus aurium. Model and Robin (*La Medicine Moderne*). J. J. C.

An American Text-book of Gynecology—Medical and Surgical. For Practitioners and Students. By HENRY T. BYFORD, M.D., J. M. BALDY, M.D., EDWIN B. CRAGIN, M.D., J. H. ETHERIDGE, M.D., WM. GOODELL, M.D., HOWARD KELLY, M.D., FLORIAN KING, M.D., E. E. MONTGOMERY, M.D., WM. R. PRYOR, M.D., G. M. TUTTLE, M.D. Edited by J. M. Baldy, M.D. Second edition, revised. With 341 illustrations in the text and 38 colored and half-tone plates. Philadelphia: W. B. Saunders; Toronto: J. A. Carveth & Co. 1898.

Though received a few weeks ago, it was impossible for us to pretend for a moment to review earlier in anything approaching an analytical manner works of such magnitude as either this, "The Text-book of Gynecology," or that of "Diseases of Children." We cannot say that we have read this work through yet, but we have had the pleasure and satisfaction of reading the greater part of it. Since the first edition of Dr. Baldy's work was published some years ago, there has taken place a considerable number of changes in the methods of treatment adopted by the modern gynecologist, necessitating the rewriting

of many parts of the book, and in order to further elucidate the text and its meaning quite a number of illustrations have been added to those already used in the original volume. The author has been especially careful not to in any way repeat himself, relegating each subject to a specific chapter. We noticed, in comparing the two editions, that the chapter on hysterectomy has been rearranged through almost its entirety, and the part of the book dealing with the bladder and ureter considerably changed as well as added to. This book, all the way through, may be said to be a complete presentation of gynecological work as practised by American gynecologists, and without being too lengthy and, consequently, wearisome, it forms a very fine working text-book for the profession in every way. We are pleased to find so much attention given to the question of the after treatment of patients, as too many surgeons exist who are well acquainted with every minutia as to the operation itself, but do not know the all-importance of the successful after treatment of an "operative" case. We have rarely come across any work where the illustrations have been so beautifully executed as to give the reader, the moment he looks at them, the idea desired to be conveyed by the author and thus save going into too much detail in the text itself.

A Text-book of Materia Medica, Therapeutics and Pharmacology. By Geo. F. Butler, Ph.D., M.D., Professor of Materia Medica and Clinical Medicine in the College of Physicians and Surgeons, Medical Department of the University of Illinois; Professor of General Medicine and Diseases of the Digestive System, Chicago Clinical School, etc., etc. Second edition, revised. Philadelphia: W. B. Saunders, 925 Walnut Street; Toronto: J. A. Carveth & Co. 1898.

It must be a matter of great satisfaction to any author to find that, ere sufficient time has elapsed to allow of his pen drying from his labors in connection with his first edition, he is called upon, owing to the large sale and favorable reception of his book to write a second and generally more lengthened volume. It is but a very short time since Dr. Butler completed the first edition, and we find that, just as we prognosticated, it has received an exceptionally large sale, and he has been forced to undertake the labor of a second. We find that since the publication of the first edition, pharmacology as a science has made considerable strides, not so much in revealing the action of new remedies as in clearing away the obscurity which had existed as to older ones. Dr. Butler has gone more fully into the action of some of the newer classes of remedies, especially those of antiseptics and antipyretics. He has, in considering cathartics and diuretics, made considerable changes, and also enlarged the chapters on both aconite and strychnine. During the years which have elapsed between the two volumes a good deal of talk has arisen as to nuclein and its therapeutics, as also regarding serum therapy, so that we find considerable space, and, we think, justly so, devoted to those newer methods of treatment. A chapter on "The Untoward Effects of Drugs," has been introduced as a new feature. One of the most interesting—though simplest—parts of the book is that portion at the end devoted to prescriptions. It will repay everyone who wishes to keep in advance of this part of science to purchase the work, as it is full of recent facts on therapeutics presented in a most attractive manner.

A System of Medicine by Many Writers. Edited by Thomas Clifford Allbutt, M.A., M.D., LL.D., F.R.C.P., F.R.S., F.L.S., F.S.A., Regius Professor of Physic in the University of Cambridge; Fellow of Gonville and Caius College. Vol. IV. London: Macmillan & Co., Limited. New York: Macmillan & Co., 1897. Toronto: A. P. Watts & Co., College Street.

This volume of Allbutt consists of "Diseases of the Liver and other Glands," and "Diseases of the Throat." Under "Diseases of the Liver," the principal and most frequent contributor is Dr. William Hunter, who writes chapters on the

Anatomy of the Liver, Functions of the Liver and their Disorders, Congestion of the Liver, Jaundice, Toxæmic Jaundice, Weil's Disease and Acute Yellow Atrophy of the Liver; Dr. W. Hale White has articles on Perihepatitis and Tumors of the Liver; Dr. Andrew Davidson, one on Suppurative Hepatitis; Dr. Lafleur, on Amœbic Abscess of the Liver; Dr. Hawkins, on Cirrhosis of the Liver; Mr. Mayo Robson, on Diseases of the Gall Bladder and Bile Ducts and Cholangitis; and Dr. John Thomson, on Congenital Obliteration of the Bile Ducts and Icterus Neonatorum. Diseases of the Pancreas are dealt with by Dr. Fitz.

Under "Diseases of the Kidneys" Mr. Henry Norris is the principal writer. He takes up such subjects as perinephric extravasations, renal fistulæ, traumatic nephritis, suppurative nephritis, perinephric abscess, renal abscess, pyonephrosis, cysts and hydatids of the kidneys, etc., etc. Diseases of Lymphatic and Ductless Glands are contributed to by Dr. Wm. Ord, who writes on myxœdema, sporadic cretinism and Graves' disease; Dr. H. D. Rolleston contributes an article on Diseases of the Spleen and Addison's Disease; Sir Dyce Duckworth has a very able and original article on Obesity. Under "Diseases of the Respiratory Organs," Dr. Ransome contributes an article on the General Pathology of Respiratory Diseases and one on the Treatment of Asphyxia. Under "Diseases of the Nose, Pharynx and Larynx," Drs. de Havilland Hall, Greville McDonald, Watson Williams and Sir Felix Lemon are the writers. Vol. IV. has most brilliantly kept up the record in giving to the profession through so many well-known writers material which is not only fully up to-date, but presented in a most attractive and readable manner.

An American Text-book of the Diseases of Children, including Special Chapters on Essential Surgical Subjects, Orthopedics, Diseases of the Eye, Ear, Nose and Throat, Diseases of the Skin, and on the Diet, Hygiene and General Management of Children. By American teachers. Edited by Louis Starr, M.D., Consulting Pædiatrist to the Maternity Hospital, Philadelphia; late Clinical Professor of Diseases of Children in the Hospital of the University of Pennsylvania; Member of the Association of American Physicians and of the American Pædiatric Society; Fellow of the College of Physicians of Philadelphia, etc. Assisted by Thompson S. Westcott, M.D., Instructor of Diseases of Children, University of Pennsylvania, etc., etc. Second edition, revised. Philadelphia: W. B. Saunders; Toronto: J. A. Carveth & Co. 1898.

That there are to-day several good works written on the subject of diseases of children is unquestioned, so that it is a most difficult task for an author, no matter who he is and what standing in his specialty he occupies, to sit down and compile a text-book which will have about it an air of newness and completeness which cannot be found elsewhere. A task of this kind is no small one, and yet, in order to secure a good sale and not have his work remaining as "dead stock" on the publisher's hands, he must accomplish something after this style. We can safely say after conning about a half of Dr. Starr's text-book, that he has, in his second edition, presented to the profession something exceedingly comprehensive in value, complete and finished in method of presentation, and racy in style. The author has embraced in the book almost every branch of pædiatrics, not confining himself to the diseases common to infants and children, but extending into diseases of the eye, ear, nose and throat, orthopedic surgery, not neglecting such (what some might style as minor details, but which on the other hand are most important) subjects as diet, hygiene and general management. We find that not only have a large number of chapters been rewritten and brought right up to date, but several new ones have been added. We find that both tuberculosis and malaria have been included in the chapters on "Infectious Diseases." A new article has been added, written by Dr. Westcott himself, on "Modified Milk and Percentage Milk Mixtures," also one on "Lithæmia," by Dr. B. K. Rachford, of Cincinnati. Dr. Jas. E. Moore, of Minneapolis, contributes the department on orthopedics.

A Clinical Text-book of Medical Diagnosis for Physicians and Students Based on the most Recent Methods of Examination. By Oswald Vierordt, M.D., Professor of Medicine at the University of Heidelberg; formerly Privatdocent at the University of Leipzig; late Professor of Medicine and Director of the Medical Polyclinic at the University of Jena. Authorized translation with additions by Francis H. Stuart, M.D., Member of the Medical Society of the County of Kings, New York; Fellow of the New York Academy of Medicine; Member of the British Medical Association, etc. Fourth American edition from the fifth German, revised and enlarged. With 194 illustrations. Philadelphia: W. B. Saunders, 925 Walnut Street; Toronto: J. A. Carveth & Co. 1898.

At the outset Dr. Vierordt, who for many years occupied the position of Teacher of Diagnosis in the Medical Clinic at the University of Leipzig, thought of publishing a much more extensive work, going into a detailed explanation of normal and pathological anatomy and physiology as being the necessary foundation for diagnosis. He later abandoned this idea, as leading to a work of too great scope. The author has made it plain all through his writings that in going into the subject it is but wise to make particular use of our senses, especially that of the unaided eye, besides availing ourselves of the finer methods of diagnosis. It is not, Dr. Vierordt points out, right to think of depending upon a chemical reaction for a diagnosis, or upon research in the laboratory by means of the microscope. Each case, he says, must be individualized in order to be correct. We find in this new edition of the work that the author has made the most revision in the part devoted to gastric digestion, and many changes also in that referring to examinations of the nervous system. We must express a little surprise that the application of the X-rays has been entirely omitted from this edition, though, perhaps, many will agree that in its infantile and undeveloped stage this was but wise. We feel, after a careful perusal, that with this work at hand any physician of even moderate ability can become a diagnostician of no mean ability.

Psychopathia Sexualis: A Medico-Legal Study. By Dr. R. Von Krafft-Ebing. Philadelphia: The F. A. Davis Company.

This notorious work has attracted a great deal of attention from the medical profession both in Europe and America; and as a study of some of the phenomena of degeneration may be considered a very valuable addition to the literature of the subject. Especially in large centres of population, where the various forms of perversion are most common, will such a book as this be a most needed acquisition to the physician who, in his professional life, is forced to face fairly the revolting facts here treated of. But no more to the physician than to the criminal lawyer will this work be useful, throwing as it does a scientific light upon certain phases of emotion which would altogether puzzle the casual observer. We look forward with keen interest to the appearance of the erudite Austrian professor's work upon mental diseases. E. H. S.

A Text-book upon Pathogenic Bacteria for Students of Medicine and Physicians. By Jos. McFarland, M.D., Professor of Pathology in the Medico-Chirurgical College, Philadelphia; Pathologist to the Medico-Chirurgical Hospital and to the Rush Hospital for Consumption and allied diseases, Philadelphia; Fellow of the College of Physicians of Philadelphia. 134 illustrations. Second edition, revised and enlarged. Philadelphia: W. B. Saunders, 925 Walnut Street; Toronto: J. A. Carveth & Co. 1898.

The author in this work has closely adhered to pathogenic bacteria and their consideration, and has not attempted to cover the entire subject of parasites, those of higher order all having been omitted. He has not even touched upon the consideration of the higher fungi, or of malaria, or amœbic dysentery, simply owing to their not being bacteria, and because a proper consideration would involve too much work and the publication of too lengthy a volume. Dr. McFarland has adhered closely to his subject, though we do

find that he has gone into, somewhat at length, the consideration of a number of spirilla, outside of that of cholera Asiatica, such as spirillum aquatilis found by Gunther in '92 in the water of the River Spree (now pathogenic); spirillum terugenus, discovered by Gunther in earth; spirillum berolinensis, discovered by Neisser in the summer of '93, and very similar in morphology to that of cholera spirillum, as well as others, which cannot be said to be pathogenic or to be the cause of any particular diseased condition. Dr. McFarland, in considering the bacteria which can be proven to be pathogenic, has wisely discussed those with which they are most easily confounded. Practitioners will find this edition to be of the greatest value to them, especially to those who graduated before science had thrown its light upon the great and comprehensive subject of disease and its etiology.

An Epitome of Mental Diseases with the Present Methods of Certification of the Insane. By JAMES SHAW, M.D. New York: E. B. Treat.

In this compact treatise the author has produced what he has indicated in the title, "an epitome of mental diseases"—a *multum in parvo* hand-book which thoroughly covers the entire ground. Among the very large number of books of the sort, there are none really better than the present and very few as good. The writer explains the meaning of a large number of psychiatrical terms, now obsolete, but which often puzzle the general reader when occurring in the writings of those whose knowledge of the subject is obsolete also.

E. H. S.

MAGAZINES RECEIVED.

The Sanitarian. October, 1898. A. N. Bell, A.M., M.D., 337 Clinton Street, Brooklyn, N.Y. $4.00 per year; 35 cents per copy. Contents: "Relation of Public Schools to Public Health," C. S. Caverly, M.D.; "Value of Health," Johnson; "Gymnasiums and Play Grounds," Major Quincy, of Boston; "Formaldehyde as a Disinfectant;" "Laboratory of New York Health Department;" "Consumption an Indoor Disease," S. H. Abbott, M.D.; "Mistakes of Small Towns," Harvey B. Bashore, M.D.; "Reorganization of the Public Health Service of Louisiana;" "American Dermatological Association," etc., etc.

The *Medical Herald*, published at St. Joseph, Mo., is a journal whose managing editor deserves great credit for work done. The pages of this journal are full of snappy, up-to-date "copy," and it is little wonder that the circulation is as large as it is.

PAMPHLETS, REPRINTS, ETC., RECEIVED.

"A Contribution to the Study of the Symptoms of Chronic Urethritis." By Ferd. C. Valentine, M.D.

"Orthoform and Extract Supra-renal Capsules." By W. Cheatham, M.D.

"Glaucoma with Detachment of Retina." By W. Cheatham, M.D.

Report of the State Board of Health of Connecticut for 1897, with the Registration Report for 1896, relating to births, marriages, deaths and divorces.

AFTER spending over a year in important service in the Women's Hospital in Philadelphia, Dr. Katherine Bradshaw has returned to the city and taken up the practice of her profession at 494 Spadina Avenue.

The Canadian Journal of Medicine and Surgery

A JOURNAL PUBLISHED MONTHLY IN THE INTEREST OF MEDICINE AND SURGERY

VOL. IV. TORONTO, DECEMBER, 1898. NO. 6.

Original Contributions.

PLASTIC INDURATION OF THE CORPORA CAVERNOSA PENIS.*

BY M. J. AHERN, M.D., QUEBEC,

Professor of Clinical Surgery at Laval University, President of the Quebec Medical Society.

I WISH to report a few cases of, and make some remarks on, a somewhat rare affection of the fibrous tissues of the penis—an affection which has been variously denominated by different authors as *chronic inflammation of the erectile tissues of the penis and of its fibrous sheath—chronic circumscribed inflammation of the fibrous sheath of the penis* (Keyes)—*chronic circumscribed induration of the corpora cavernosa* (White)—*fibrous transformation of the pectiniform septum and sheath* (Gross)—*fibroid sclerosis of the corpora cavernosa* (Taylor)—*nœuds et ganglious des corps caverneux* (Nélatin)—*induration plastique des corps caverneux* (Reclus)—and *nœuds des corps caverneux* by most French authors. This disease with the many names is said to be one of old age by most writers; one of middle life by others, and by Gross to be most frequent between 30 and 40. Yet it has been met with in patients aged 21, 26, 27 and 28 years respectively.

It is said to occur most frequently in those who have abused of sexual intercourse. It is characterized by a localized induration of the fibrous sheath (and underlying tissue, Keyes) of the C. cavernosa and also of the pectiniform septum. When the sheath is affected the diseased part is felt as a circular or quadrangular plate, hard, smooth, resilient, immovable and not adherent to the skin which is freely movable over it. These hard plates are more frequently met with on the dorsal part of the sheath than elsewhere.

* Read at the Canadian Medical Association, Quebec, August, 1898.

When situated in the pectiniform septum the nodules are wedge-shaped—the base of the wedge upwards—and when the contiguous portions of the sheath on each side of the base of the wedge are affected the nodule is more or less saddle-backed. The induration rarely extends through the whole thickness of the corpus cavernosum. Two or more nodules may exist at the same time. According to Keyes a nodule may disappear and be replaced by another elsewhere. Easily discovered when the organ is flaccid, they are scarcely appreciable when it is in a state of erection during which they do not expand, thus causing the penis, at that spot, to be bent over to the affected side, producing what Ricord called penile strabismus. When the induration extends through the whole thickness of both c. c., that part of the penis situated in front of the induration remains flaccid during erection, and the male organ of generation has then the undignified appearance of a flail. Although this bending of the penis is rather awkward during sexual intercourse yet it does not altogether impede it. The semen is expelled but slowly, and sometimes it oozes away only after erection has ceased.

As a rule the bending of the penis first attracts the patient's attention and brings him to the surgeon. The nodules gradually and very slowly increase in size and number—or remain stationary—never getting very large and never disappearing and being situated generally in the posterior three-quarters of the organ. They never become large enough to permit of their discovery by simple inspection. They never suppurate. In the beginning there may be some slight pain and the hard spots may be tender under pressure. This affection was first well described by La Peyronie in 1743, later on by Kirby, and in 1874 by Keyes. The last extended account of it was given by Tuffier in 1885.

The etiology is obscure. La Peyronie ascribed the disease to syphilis and his opinion prevailed until 1850, when Kirby, supported by Verneuil, Paget and others, rejected it and declared the affection to be always due either to gout or to diabetes.

After 30 years of age, according to Tuffier, the tissues which form the c. c. begin to increase in thickness and to lose somewhat of their elasticity; these changes become gradually more pronounced with age, and under the influence of arthritism and its manifestations, gout and diabetes, become exaggerated and progress irregularly, thus producing the nodes. This explanation does not cover the cases occurring in young subjects.

At the present day gout and diabetes are looked upon as being the principal, if not the sole, etiological factors. Nevertheless, a few cases supposed to be of syphilitic origin have been reported; but the facts on which this etiology is founded are far from being conclusive. Antisyphilitic treatment has cured only one patient whose nodes disappeared after the prolonged use of KI. in large doses.

In another patient, undoubtedly syphilitic, a long course of KI.

was followed by the disappearance of an induration in one c. c., while a new node showed itself in the other. So that the treatment was not conclusive as to the etiology of the affection.

Some have thought that the affection might be the result of a traumatism. But there is no evidence in favor of such etiology unless we accept as proof the two following rather remarkable cases reported by O'Zoux, of Bordeaux: Two young men, intimate friends, Mr. O., medical student, and Mr. T., a soldier, after exposure, injected with force, as a prophylactic, a strong solution of sulphate of copper. Two months later the soldier showed the student a small hard nodule the size of a pea in his right c. c. He had discovered it by accident. He had never had either tenderness or pain. The student then examined his own penis, and to his great surprise discovered a similar lesion. Neither of these young men had ever had any venereal disease nor did they suffer from gout, diabetes or rheumatism; it is not probable that their nodes had a traumatic origin, as they never had either pain, tenderness or an ecchymosis. Their nodes did not disappear.

The histology of these tumors is not very well known. In the case of a man aged 50, from whom Tuffier removed one on account of pain, the microscopical examination showed that it contained both fibrous and cartilaginous tissues and was a chondro-fibroma.

A node removed four years ago at Bellevue Hospital, N. Y., for examination, was said by the pathologists of the Carnegie Laboratory to be a carcinoma of the c. c. (*Med. Rec., N. Y.*, 97, v. 1, p. 283.) When gummy tumors of the c. c. shrivel up, and become fibrous or calcify, they might be mistaken for the nodes of plastic induration. The former are very rare—occupy generally only the anterior third of the penis—are hard, painless swellings which have been larger, and the patients have a history of syphilis.

In plastic induration the nodes are hard, frequently tender on pressure and often painful in the beginning, increase in size very slowly, may remain stationary but never diminish, and are not affected by antisyphilitic treatment.

All observers agree in regarding the disease as incurable. In young men it is liable to bring on neurasthenia and be a cause of suicide.

I know of only two cases said to have been cured—one in a syphilitic patient already mentioned and the other a diabetic whose nodes disappeared under treatment for his diabetes. Treatment is useless—removal of the tumors, if they impede copulation and are not too numerous, is recommended by most authors.

Within the last few years I have seen the following cases:

Case 1.—J. J., a country merchant, consulted me on the 6th May, 1893, for a hard lump in his penis. He is 46 years old—has been 21 years married—father of nine children, two of which died a few hours after birth, he knows not why; one died of diphtheria and one of diarrhœa (infantile). From some unknown cause his wife was prematurely delivered at six months and seven months at her third

fourth and fifth pregnancies. Family history presents nothing worth noting except that patient's mother had during several years œdema of the lower extremities which disappeared about seven or eight years before her death, due to strangulated bowels. Patient resembles his mother, whose family was inclined to obesity. On the 10th March, 1893, after having worked all day in a store that was very cold, J. J. felt a scalding in the urethra during micturition and found that the penis and lower belly were sensitive on pressure. Fifteen days later he discovered some hard lumps in his penis. On the right half-dorsal aspect of penis, one-half inch behind the glans, may be felt a hard, well-defined round plate, seemingly a foreign body, situated in the right c. c. and over which the skin moved freely. It had the shape and was of about the size of a ten-cent piece. A short distance behind this plate both c. c. are hard, round, nodulated and tender on pressure. This induration extends backwards to the crura. During erection penis is bent to the right. There is some scalding during micturition, but no discharge of any kind. Has never had any venereal disease. Has no stricture of the urethra nor any disease of the prostate, and does not remember having suffered any traumatism of the penis. No history of gout or diabetes. After taking KI. during some months there was less smarting on passing water and less tenderness of the indurated parts, but they had diminished neither in size nor in consistency.

Case 2.—On July 17th, 1893, was consulted by N. L., 64 years, for deviation of the penis during erection. Married 39 years —lost his wife two months ago. One month after her death noticed that during erection penis was bent to the left. Health has been always good. Had gonorrhœa 19 years ago. Family history uninteresting.

Examination.—On the dorsal aspect of the penis, close to its root, may be felt a hard, wedge-shaped nodule in the left c. c., entirely independent of the skin, which is freely movable over it. Behind this hard mass are several smaller ones of the same consistency. These indurated spots have never been painful nor have they been sensitive under pressure. Patient has had no discharge during last 19 years—has no stricture—micturition is normal—no disease of the prostate. Has never had syphilis, gout, rheumatism or diabetes. Pot: Iod. had no effect on his disease.

Case 3.—On October 17th, 1896, saw Mr. T., a lawyer, 50 years. Had been married seven years, then fifteen years a widower, and now married for the second time nineteen months ago. Nothing worthy of mention in his family history. His previous health has been good. Has never had syphilis, gout or rheumatism; but has headaches before bad weather and was rather fond of his drop at one time. Has had gonorrhœa several times. In 1896 he noticed on the dorsum of the penis and about its middle a small hard round nodule of about the size of a pea. Since his marriage this has increased in size, and during erection the organ is so much bent to the left that, as he says, had his wife not

made the acquaintance of several gynæcologists before she made his, he never would be able to fulfil that most important, though unwritten, condition of the marriage contract. He declares that gynæcologists are Heaven-sent.

Examination.—About the middle of dorsum of the penis is found a broad plate of bony hardness which extends forwards and becomes narrow, reaching almost to the glans. The narrowed part feels like a pipe-stem, and is grooved on its upper surface, which is flat. It occupies the septum. When young, patient had the habit of bending penis during erection, and since then that organ has always had a tendency to double up when distended.

A CASE OF BICORNATE UTERUS MISTAKEN FOR ECTOPIC GESTATION.*

BY W. J. GIBSON, M.D., BELLEVILLE.

As the condition known as bicornate uterus is of rare occurrence, and when present renders diagnosis extremely difficult in diseases of the uterine appendages, I desire to place on record a case that came under my observation a few years ago and led to an error in diagnosis.

I was consulted in October, 1895, by a young unmarried woman who complained of a profuse leucorrhœal discharge which for some months previous had been a source of very considerable discomfort. Her general health was good, menstruation regular, and except for the irritation caused by the discharge she was apparently in good physical condition. There was no suspicion of specific cause. No examination was made at the time. Complete rest and astringent douches were ordered, and in a few weeks the discharge ceased.

I did not see the patient again until March of the following year, when I was called to attend her for a severe attack of bronchitis. At this time she complained of pelvic pain of a bearing down character, and stated that she had not been regular. Further questioning elicited the fact that there was a suspicion of pregnancy, and that menstruation, hitherto regular, had failed to appear in January. Of her own accord she had tried a number of domestic remedies, and in February, about the usual time, menstruation returned, lasting three or four days, of normal amount, and accompanied by a great deal of pain. The character of the flow was, as she described it, shreddy.

I did not make any examination, but advised her to keep quiet until her cold was better and then to let me know how she was. A month elapsed before she again consulted me. She looked very much run down; said that the period had failed to return, and that

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*Read at the Canadian Medical Association, Quebec, August, 1898.

she was constantly sick at the stomach, could not retain anything. I sent her to the hospital, and on making an examination found the cervix softened, an ovoid tumor lying to the left of the uterus, apparently continuous with it, and in size about two inches wide and three inches long. It was extremely tender to the touch; slightly movable. Further examination disclosed to the right what I believed to be the body of the uterus. I was puzzled as to the condition; I thought there was a congenital lateral displacement of the uterus to the left, and to the right a fibroid growth. It seemed to me that if my conclusion was correct, the severe and almost constant pain could be accounted for by the firm attachment of the organ in an unnatural position, preventing its gradual ascent from the pelvis. Again it struck me that it might be a case of ectopic gestation. The great amount of pain, threatening rupture, together with the history of flow in February, of a shreddy character, gave strong probability of ectopic gestation.

Still another solution presented itself. There was a possibility that it might prove to be a bicornate uterus. I determined to give the patient chloroform to facilitate examination. I accordingly asked Drs. Clinton and Yeomans in consultation and explained the nature of the case. Chloroform was administered, and we proceeded to make a careful examination. I stated I was in doubt as to tubal pregnancy or bicornate uterus.

Both Dr. Clinton and Dr. Yeomans made an examination and found the condition as stated. I determined, therefore, to find out if possible whether the body to the right was the uterine body; and with this object in view, cautiously introduced the sound, directing it to the right, and it passed in without resistance to a distance of three and one-half inches. By external pressure from above, and gentle movement of the sound, it was clear, from the very perceptible movement, that the sound was in the uterine cavity; that much at least was clear. There appeared to be no means of determining between tubal pregnancy and bicornate uterus, except by exploratory incision. The patient's condition was fast becoming desperate from the constant pain, incessant vomiting, and loss of sleep. She was terribly emaciated, and was evidently fast going down. It was decided to make an exploratory incision, our conclusions leaning towards tubal pregnancy. Preparations were accordingly made, and on the following day, assisted by Drs. Clinton and Yeomans, I opened the abdomen and the condition was at once disclosed. The tumor proved to be the impregnated left horn of the uterus; the tube and ovary were normal. On the right side was the other horn with tube and ovary. Ovary on the right was smaller and tube shorter than that on the left. I at once closed the abdomen with three tiers of catgut sutures. The skin was approximated with fine silk sutures, and the usual dressing applied. Patient returned to bed very weak, but soon rallied. Vomiting and nausea increased; pain also continued more severe than before. Hypodermic of morphia and

atropine was given which produced some relief. The history of the following eight days was indescribable. What with thirst, nausea, vomiting and pain, it was almost impossible to keep her in bed. She could not be kept quiet in any position, but tossed restlessly to and fro, apparently in agony. I was in constant fear that the wound would open from the severe strain put upon it. I felt the patient would surely die unless abortion was induced, and this I was afraid to attempt lest the accompanying labor pains should force open the wound. So restless had she become that she would sit up in bed in spite of the nurse's efforts at restraint.

On the eighth day after the operation I was hurriedly summoned, and found her flowing, the os dilated, fœtus presenting, and labor pains severe. In less than twenty minutes after my arrival the fœtus came away, quickly followed by the placental structures. The fœtus was quite macerated, and had evidently been dead for two or three weeks. I at once gave her an inter-uterine douche of one to five thousand sol. bichloride. I do not know which was the more relieved at the result, the patient or myself. Her recovery, though slow, was uneventful. The abdominal wound stood the strain and the union was perfect. She remained in the hospital for six weeks following, and before dismissing her I passed a sound without difficulty into each horn of the uterus, and the horns could be easily made out by bimanual examination. Only one cervical canal could be discovered.

PULMONARY TUBERCULOSIS—SYMPTOMS AND DIAGNOSIS.

BY JOHN HUNTER, M.D., TORONTO.

PROBABLY no other disease, unless it be syphilis, presents such a diversity of symptoms, in number, kind and degree. A person may have lived many years after the primary infection without sign or symptom of the disease, and yet after death from some other cause, tubercular foci may have been found in the lungs. At the Congress of Tuberculosis recently held in Paris, Beclére read a communication in which it was stated that out of 124 cases admitted into the hospital for medical or surgical treatment, and who had been carefully examined by the usual methods for evidence of tuberculosis, and pronounced free from it, yet, on being submitted to the X-ray test, fifty-one presented abnormalities of various kinds—lessened transparencies of the apices, enlarged bronchial glands, opacity of the pleura, diminished movement of the diaphragm, etc., appearances quite characteristic of tuberculosis. His conclusions are that latent tuberculosis exists in two or three out of every five young people, and that the tubercular lesions are dis-

guised under the mask of anæmia, chlorosis, dyspepsia and neurasthenia.

On the other hand, so pronounced are the evidences of the disease that people, standing on the platform of railway stations at any of the Southern health resorts, keep facetiously remarking, "Hello! more lungers," as patients step off the cars.

There is a great contrast between the condition of those with latent lesions and those in which the lung tissue is extensively involved. The following description will include the symptoms most frequently found between the initial invasion of the bacilli and the fatal termination. The patient's attention is often first drawn to his condition by remarks made by his friends. They notice that he has changed somewhat. His features are more pinched; skin dry, sallow or pale; lips parched; one or both cheeks flushed; eyes bright; emaciated; short, dry, hacking cough. He admits that he is not quite himself, and attributes his condition to a "cold." He says he cannot get altogether rid of his cough.

Cough.—This is one of the earliest and most persistent symptoms. It is influenced in frequency and character by impure air, anything that causes irritation anywhere in the respiratory tract, and by the conditions and contents of the tubes and air cells. It may be attended with expectoration of a small quantity of frothy serum or mucus, or by a very large amount of muco-purulent matter. Change of position is very apt to excite an attack of coughing.

Sputum.—This is modified in quantity, consistency and character by the amount of secretion and exudation, dilatation of bronchi, and presence of cavities with patulous openings. The quantity may be very limited or so excessive that pints may be expectorated during the twenty-four hours. The consistency varies from a watery serum to thick agglutenated masses, and in character it may be simply serum or mucus, blood, pus, or any admixture of these.

Temperature.—Unless in hospital cases it is very difficult to get a reliable temperature record during the early stage of the disease. However, if the temperature be taken—especially in the rectum—say, every fourth hour throughout a period of two or three weeks, a series of pretty uniform elevations and remissions will be recorded—the former beginning about 1 or 2 p.m., reaching a maximum between 4 and 7, and subsiding to normal by 10 p.m. Between midnight and noon the temperature may remain about normal, but often in the early morning hours it may be subnormal from ½ to 1½ degrees. As the disease advances, septic conditions arise with characteristic temperature fluctuations. The range may extend from 95 to 108°. In some cases there is a reversion of the usual type—the elevation occurring in the morning and the remission in the afternoon

Pain.—This is pre-eminently cosmopolitan. Any organ in the body may be the initial "storm centre." Slight or intense pain,

cranial, aural, ocular, facial, laryngeal, cardiac, gastric, hepatic, splenic, intestinal, renal, ovarian or cystic may antedate the pulmonary symptoms. In a recent case intense pain over the gastro-hepatic region preceded for fully a month the appearance of any sign of lung trouble. The pain may be located over any part of the pleura and be due to a localized pleurisy.

Emaciation.—The fatty tissues usually waste away early. The tissues above and below clavicles and between ribs atrophy, giving the chest quite a characteristic shape—supra and infra clavicular and intercostal depressions, antero-posterior diameter diminished, transverse and longitudinal apparently increased. The atrophy of muscles about scapulæ allows these bones to project, forming the so-called "winged scapulæ." The emaciation varies very much in degree and may be general, or certain parts of the body may be much more affected than others.

A change of climate often enables a patient to regain his weight, even to the extent of 20, 50 or 100 lbs., although the physical signs still show extensive lung trouble. Patients admitted into hospitals or sent to a sanatorium frequently gain in weight during the first few weeks, or even when the disease becomes quiescent several pounds may be regained.

Digestive System.—Closely associated with, and often a potent factor in producing emaciation, is disturbance of the digestive functions. The appetite may be impaired early and even vomiting may occur, although much more frequent at later stages. It is often a very troublesome factor at or soon after meal-time, or during paroxysms of coughing. The tongue may be pale, flaccid, indented with the teeth, pretty uniformly covered with a thin white, or thicker yellowish fur, or some areas of it may be clean, with papillæ, large, red and irritable. The amount of fever influences the condition of the lips, tongue, fauces and pharynx. The mucous membrane becomes parched, raw and fissured. The tonicity of the stomach is very apt to be impaired, permitting a large amount of distention, so that food or medicine is very imperfectly prepared for assimilation or absorption. The secretions and digestive functions of the intestines may be disturbed, producing constipation or diarrhœa. Ulceration may occur anywhere along the tract, giving rise to pain, tenderness or hæmorrhage. Anal fistula, especially in male patients, is quite common.

Nervous System.—All, or any of the "side shows" accompanying the aggregation styled neurasthenia, may be in evidence under the canvas of tuberculosis—innumerable pains and aches, persistent or recurring at intervals; insomnia or drowsiness, buoyancy or depression. However, one mental characteristic is especially well marked, and that is "irrepressible hope." He feels sure of being better by and by.

Cutaneous System.—In the earlier stages and often throughout the whole course of the disease, and especially with those who are somewhat vaguely classified as of nervous or sanguine tempera-

ment, the skin becomes quite transparent and mobile, giving the patient a delicate, hyper-sensitive expression. In other cases more or less pigmentation occurs, giving rise to freckles or yellowish brown patches. The presence of more or less profuse perspiration, especially at night, is an early symptom, and may become very troublesome and persistent.

Diagnosis.

Frankly assuming that pulmonary tuberculosis is one of the most curable of chronic diseases, and considering the relationship existing between patient, relatives and public, as to infection, the importance of the earliest possible recognition of the disease cannot be overestimated.

Ever since the discovery of a specific bacillus its presence in the sputum outweighs all the other evidences of the disease. It follows then, that the most scientific microscopic tests be persistently made, if necessary, for several months. The bacilli may not be found until the contents of a cavity appear in the sputum, or they may be absent during some stages in all cases, especially when there is no active softening going on. Their continued presence in the sputa may also be accepted as positive proof of the character of the disease. In the absence of the bacilli the symptoms already enumerated and the following physical signs have to be relied upon for making a diagnosis :

Initial stage.—When the apex becomes infiltrated with tubercular deposit, respiratory movement is diminished. This is more distinctly observed by standing behind the patient and looking over the shoulder, or by fixing attention to the movements of the second rib. Palpation reveals increased vocal fremitus. However, great care must be exercised in comparing the two sides, remembering that it is normally more pronounced over right apex; hence, when it is equal on both sides, the left apex is probably involved. Percussion may elicit a duller note, above, over, or below the clavicle. Slight differences in the amount of resonance may be made more appreciable by having the patient retain his breath for some time after a deep inspiration.

Auscultation.—In the healthy chest the inspiratory murmur is somewhat higher pitched, and the expiratory more prolonged on the right side than on the left. Overlooking this condition may lead to serious error. Making due allowance then for the difference in the two sides, the harshness or feebleness of the sounds are to be estimated. Usually the harsh sound with prolonged expiration is heard first. As the disease advances the breath sounds become feebler and interrupted, and after coughing râles may be heard. The harsher and the feebler sounds indicate stages in the progress of the disease, the latter the more advanced, the former the initial process. Neurotic subjects, with healthy lungs, may present bilaterally interrupted wavy sounds. Where considerable infiltration has taken place, the voice and heart sounds are con-

veyed more distinctly. The patient should be asked to fold the arms, and bow the head forward in order that the upper parts of interspace between the scapulæ can be thoroughly examined for involvement of the apex of the lower lobe. Special attention should be given to the fact, that when only one lung is impaired, the functional activity of the healthy one is increased. There will be puerile breathing and increased expansion. Overlooking this fact has led to many ridiculous blunders, one physician locating the trouble in the healthy lung, another in the diseased one, the patient being much embarrassed to know how both lungs can be sound and diseased at the same time.

Râles.—These sounds vary in character with the progress of the disease. At first a few fine crackling sounds are heard on deep inspiration, but later as liquids accumulated in cells and tubes, they become numerous, and of a louder, moister tone. Careful search should be made in supra-spinous region, as the disease is usually more advanced over posterior portion of the apex. The change in the number, size and quality of the râles indicates the progress of caseation or softening going on in the tubercular lesions.

Cavities.—When these become numerous or extensive about apex, the shoulder is depressed, clavicle and scapulæ elevated, supra-spinous and clavicular fossæ sunken, intercostal spaces widened and chest flattened. Percussion note may be high pitched, tubular or tympanitic. Vocal fremitus increased. On auscultation the breath sound varies with the extent of the openings, condition of cavity walls and contents of cavity. The following are some of the terms used to describe the sounds associated with cavities: hollow, cavernous, metallic or amphoric, gurgling, echoing, etc. "Post-tussic suction is another highly significant sign; it consists of a high-pitched, sucking, inspiratory sound immediately following the forced expiration of cough, and is due to the elastic recoil of the cavity walls."

Sequelæ.—The ordinary course of this disease may be very much modified. The presence of pneumonia, pleurisy, emphysema, bronchitis or laryngitis adds its own specific features.

Dr. Chas. Robinson, of Brampton, was seized with heart failure on October 17th just at the completion of a surgical operation that he had performed, assisted by Dr. Bowles, of Woodhill, near Bolton, and expired almost instantly. Dr. Robinson was born at Claude sixty-three years ago, and lived there for thirteen years, when he bought Dr. Pattullo's practice and property in Brampton. He contested the riding of Cardwell twice in the Liberal interests, and was returned once, but defeated subsequently. He leaves a widow and three daughters. The funeral took place on Wednesday the 19th.

Selected Articles.

THE ELIMINATIVE TREATMENT OF TYPHOID FEVER—A REPLY TO A RECENT CRITICISM OF THIS METHOD.

BY W. B. THISTLE, M.D., L.R.C.P. (LOND.), TORONTO,

Lecturer in Clinical Medicine and Diseases of Children in the University of Toronto; Physician to the Victoria Hospital for Sick Children and to the Out-Patient Department, Toronto Hospital.

In a recent paper on "Some of the Intestinal Features of Typhoid Fever,"[1] Dr. Osler refers to the eliminative plan of treatment as follows: "We have possibly been too fearful of the dangers of the use of purgatives in typhoid fever. The experience of a great many men who have adopted the eliminative method of Thistle, or who have given salines or calomel freely, shows that the mortality is not materially increased over that from the ordinary symptomatic plan. My contention, however, is that they are not indicated, as it is not likely that the typhoid bacilli multiply and develop their poison to any extent in the intestinal contents themselves."

The first sentence in the above quotation would seem to indicate a remarkable change in the mind of the distinguished author regarding the use of purgatives in typhoid fever. Hitherto their use has been denounced by him as "wrong in theory and dangerous in practice." Now, accepting the experience of a large number that the practice of giving purgatives in this disease is not dangerous, and thus having got rid of "the lion in the way," he still maintains that their use is wrong in theory. The eliminative and antiseptic method of treatment has on other occasions received some attention at the hands of Dr. Osler, but always in the way of denunciation and adverse criticism.

To this course one could not possibly have the slightest objection but for the fact that the criticism has been directed, not against the theory advanced, but against what the objector supposed to be the theory. From the consistent way in which the theory of eliminative treatment has been misstated and misunderstood by him,[2] the only inference open is that my papers on the subject in which the theory involved in this plan of treatment was set forth had unfortunately escaped his notice.

The quotation from his recent paper, given above, illustrates admirably what I have just stated. His contention that purgatives are not needed, because he considers it unlikely that the typhoid bacilli multiply and develop their poison to any extent in

the intestinal contents themselves, would imply that in carrying out this plan of treatment purgatives are given with the sole purpose of clearing typhoid bacilli and the poison generated by them from the intestine.

Such is not the case, and it is manifestly a misrepresentation of the theory of eliminative treatment to convey any such idea to the mind of the reader. In all my published papers[3] I have taken the utmost pains to combat this error and to point out that the idea of elimination by means of purgatives must not be limited or confined to the simple clearing of bacilli and toxins from the intestine, but must also embrace withdrawal of toxins from the body by way of the intestine. In short, elimination in typhoid fever must be understood in the same sense as elimination in, for example, lead poisoning.

The idea in the use of purgatives in the treatment of typhoid fever, if I may be permitted again to outline the theory, is:

1. To facilitate throughout the entire duration of the disease elimination of toxins from the body.

2. To clear out the intestines at the earliest moment, carrying away bacilli and toxins which would otherwise in all probability go to increase the existing infection and intoxication of the body.

3. To keep the intestines as free as possible from bacilli and toxic substances, thus preventing in a great measure reinforcement to the bacilli and toxins already located in Peyer's patches, the solitary glands, mesenteric glands, spleen, and other parts of the body.

4. To maintain the bowels free from bacilli, of all kinds, and from accumulations of decomposing and toxic substances, and thus to enable the liver to exercise its poison-destroying and depurative functions to greater advantage against the poisons produced by the colonies of bacilli situated in the lymphatic structures, spleen, or elsewhere in the tissues and fluids of the body.

Modern physiology has made it clear that one of the greatest functions of the liver is to intercept and destroy or cast out of the body toxic substances found in the circulation.

The toxic substances must of course be carried to the liver either by the blood stream in the hepatic artery or by the veins of the portal system.

As a result of this poison-abstracting function of the liver, the pint or more of bile daily poured into the intestine is under ordinary circumstances in the healthy body highly toxic. Semmola and Gioffredi in their recent work on "The Physiology of the Liver and the Function of Bile," in the "Twentieth Century Practice,"[4] accept the estimate made by Bouchard, that the bile is under ordinary circumstances nine times as toxic as the urine.[5] They also draw attention to the fact that in case of bacterial invasion, such as typhoid fever, the toxicity of bile becomes immensely increased.[6]

It is therefore most reasonable to assume that by frequently

and repeatedly clearing from the intestine this highly toxic bile the sum of poison in the body is lessened, for be it remembered, if the bile poured into the intestine be not carried on out of the intestine, it to a great degree becomes reabsorbed, and thus the effort of the liver to free the body of the toxic substances is in a measure rendered nugatory.

In the case of the typhoid toxin Semmola and Gioffredi quote Roger as having demonstrated that it actually is intercepted by the liver.[7]

Clearing out the intestine and maintaining it as free as possible from all forms of bacilli and toxins indirectly assists the depurative function of the liver, for the less the amount of poison carried by the portal system from the intestinal tract, the more effectually will the liver deal with the toxins in the general circulation. This scavenger function of the liver is, however, exercised within certain limits, and if excessive quantities of poison should be carried from the intestine the function may be taxed to the full; and so the liver will be unable to deal with the toxins in the systemic circulation. Or, again, the portal blood may carry so much toxin from the intestine as completely to overwhelm the liver, so that it is able neither to guard the portal entrance nor to intercept toxins coming through the general circulation. The irritation of hepatic tissue in this way would seem to furnish an explanation of the tenderness and enlargement of the liver sometimes noticed during the course of typhoid fever.

Consideration of these facts in hepatic physiology cannot but impress one with the desirability of constantly clearing away the toxic bile and of keeping the intestine as free as possible from bacilli and toxic substances throughout the entire duration of the disease. It also shows the wisdom of employing intestinal antiseptics and of exercising care in the arrangement of the patient's food, so that the least possible residue may escape assimilation and remain in the intestine to undergo decomposition.

The antiseptic substances chosen should, however, be the least harmful, for, if poisonous substances are selected to purify the intestine, they themselves become a tax upon the liver. I have before pointed out that toxic antiseptics—*e.g.*, salol—can be used much more freely if at the same time purgatives are employed frequently.[8]

Elimination of toxins by way of the intestinal canal, although mainly through the medium of bile, occurs to a very considerable extent through the serous exudate from the intestinal wall.

None, I imagine, will question the correctness of this view. In a condition such as typhoid, where the fluids of the body hold in solution excessive quantities of toxic substances, the serous exudate into the intestine in response to purgatives must of necessity bring with it some of the toxins. Purgatives, then, facilitate elimination of poison from the body through the toxic bile, and to a lesser degree perhaps through the toxic serum.

One cannot leave the consideration of this subject without noticing the indispensable relation which the giving of large quantities of water bears to the use of purgatives in this scheme of elimination. Unless care be exercised in this matter the fluids of the body would be drained off, to the serious disadvantage of the tissues. Moreover, the toxins in the body would become more concentrated and therefore more harmful.

A moment's reflection will show the wisdom of this course during the employment of purgatives, in this way replacing the toxin-laden fluid which has been carried away.

Although the purpose of this paper is to indicate the use of purgatives in the treatment of typhoid fever, yet in the eliminative plan of treatment which I have advocated the excretory function of the kidneys was not lost sight of, and it was shown that elimination of toxins by the kidneys is facilitated by the giving of large quantities of water.

I have before also advocated the use of calomel, in connection, of course, with salines, because of its excellent diuretic action.[9] It consequently promotes elimination through both the intestines and the kidneys.

To summarize, the use of purgatives in typhoid fever and the purpose of the eliminative plan is:

1. To limit the original infection and intoxication of the system generally.
2. To carry away the toxic bile as it is poured into the intestine.
3. To promote elimination through the medium of the serous exudate into the intestine.
4. To promote excretion of toxins by the kidneys.
5. By lessening the toxæmia, to increase the resistance and aggressive action of the tissues. (I have before drawn attention to the fact that the aggressive and defensive action of the cells must be in inverse ratio to the degree of toxæmia.[10])
6. To prevent excessive accumulation of bacilli (typhoid bacilli, colon bacilli, etc.) and toxins in the intestinal glands, thus lessening the likelihood of extensive necrosis and ulceration, and the dangers incidental to that condition.
7. By maintaining the intestine as free as possible from bacilli and toxins, and frequently clearing it out to lessen the work thrown on the liver from the portal side, and thus to enable it to exercise its depurative function more fully in the interception of poisons in the general circulation.
8. To lessen the chance of death from exhaustion due to the long-continued action of large quantities of poison on the tissues.
9. To lessen the amount of poison in the body and avert the danger of death from excessive accumulation of toxin, *i.e.*, acute toxæmia.
10. To prevent the discomfort and danger arising from accumulation of gases in the intestine.

11. To prevent or control diarrhœa. Whether the diarrhœal flux be due to bacilli or irritant matter in the intestine or is the physiological result of toxic substances in the system, in either case the action of purgatives would be beneficial. In the one case the irritants, whatever their nature, are removed; in the other the systemic toxæmia is lessened.

12. By keeping toxæmia at the lowest possible point, the functions of digestion and assimilation are less interfered with and nutrition is better maintained.

Dr. Osler will have it that the advocates of the use of purgatives and antiseptics look upon typhoid fever as a disease of the intestines, while he himself would be with those who have learned within the last few years that it is an infection of the system generally. Such an assumption is entirely unwarranted. My own position has always been that typhoid fever is a disease primarily of the intestines, the bacilli first invading the tissue in the intestinal wall and afterward reaching all parts of the body. Although primarily a disease of the intestine, it quickly becomes a general infection. So great an authority as Prof. Sydney Martin adheres to that view of the question, and considers that "the arguments advanced in support of the belief that typhoid fever is a general infection with a secondary intestinal lesion, are not very satisfactory."[11]

He considers that, "from our knowledge of other intestinal infections, the view that the infection in enteric fever is primarily intestinal is the more logical."

That intestinal ulceration is not an essential or necessary feature in typhoid fever I fully believe. I advanced that view in my paper published in the *Medical Record* of March 1, 1894, and pointed out that if the intestine be thoroughly cleared the process of infection is interrupted, the local infection of the gland to some degree limited, and as a result the glandular tissues are more likely successfully to resist the bacilli already located in them and to escape necrosis and ulceration.

Coming now to the contention that it is not likely that the bacilli in the intestinal contents multiply and produce their poison there to any extent, at the outset I desire to point out that the presence of specific bacilli in the intestinal contents is not essential to the theory of eliminative treatment. In their entire absence the effect of purgatives would still be to carry out of the body the poison-laden bile and the serous exudate containing its quota of toxin. However, the objection does not appear to be well taken. There are many reasons that make it extremely likely that the specific bacilli do multiply and produce their poison in the intestinal contents themselves.

Presumptive evidence of their multiplication in the intestines is furnished by the fact that the infection is carried by the intestinal contents. The simultaneous infection of several feet of the intestinal mucosa I have before advanced as a reason for believing in a previous multiplication in the intestinal contents.[12]

There is much difference of opinion among bacteriologists concerning the identification of typhoid bacilli in the intestinal contents. The very close resemblance to the colon bacillus is the great difficulty. As bearing directly on this question, I quote the following from the recent Croonian lectures by Prof. Sidney Martin.[13] "It has been said that inasmuch as the bacillus is not constantly found in the motions and is found in the urine, that there are not many bacilli in the intestine. There is nothing whatever in this argument. We can readily see that the bacillus might not be discharged in the fæces in sufficient numbers to be easily found. Moreover, if there is a great increase in the number of bacillus coli in the intestinal tract, not only is there great difficulty in finding the typhoid bacillus in the presence of large numbers of this micro-organism, but the more vigorous bacillus coli might actually beat out of the field the less vigorous typhoid bacillus."

One must also not lose sight of the fact that much of the toxæmia is, as I have before argued,[14] in all probability due to the products of associated bacilli and to decomposition in the intestine.

In the case of the bacillus coli the probability is exceedingly strong that it plays a very considerable part in the production of the symptoms seen in typhoid. In a former paper I drew attention to the fact that the damaged intestinal wall opened the way for the migration of the colon bacillus from the intestine.[15]

The recent experiment of Sydney Martin[16] would seem to have definitely settled the point. He extracted colon bacilli from the spleen of a patient with typhoid fever, and found that their virulence was much increased over that of colon bacilli from the normal intestine. He assumes, also, that the colon bacillus had been carried from the intestinal canal.

We have in this experiment an actual demonstration of the correctness of the view held by many that the bacillus coli becomes increased in virulence when associated with the typhoid bacillus. It is also confirmatory of the belief that the injury done to the intestinal wall by the specific bacillus opens the way for the colon bacilli. These facts being borne in mind, it is surely not difficult to appreciate the advantage of keeping the intestine as free as possible from bacilli of all kinds, even if one were to grant, in spite of evidence to the contrary, that the typhoid bacilli do not multiply and produce their poison to any extent in the intestinal contents themselves.

I believe, too, that in preventing decomposition and bacterial accumulation in the intestines, the liability to those bacterial invasions of the weakened body in the late stage of the disease, commonly spoken of as "terminal infections," is greatly lessened. Undoubtedly the invading bacilli in the vast majority of these cases come from the intestine.

The constant effort to facilitate elimination and keep the toxæmia at the lowest point throughout the disease of course con-

tributes in lessening this liability, owing to the fact that nutrition is less interfered with, and consequently the tissues maintain a higher quality of resistance.

In advancing the theory of eliminative treatment in typhoid, I have always adhered to the view that much of the toxæmia and many of the symptoms were due to the associated bacteria;[17] that there was, in other words, a mixed infection, if not primarily, at all events as a later development.

Regarding the experience of those who have adopted the eliminative plan of treatment, I am not disposed to accept what Dr. Osler asserts is their verdict, namely, that the mortality is not materially increased over that of the symptomatic plan. Their experience, I believe, and I have had many communications and many opportunities for discussion, goes to show that the adoption of the eliminative plan lowers the mortality in a remarkable degree. More than that, it lessens the severity of the symptoms and the duration of the fever. Indeed, many of the symptoms wholly disappear under this form of treatment.

I might instance the record of the Toronto General Hospital, although not all the cases were treated on this plan. However, the vast majority were treated either on the eliminative plan or by means of calomel and salines or other purgatives freely and frequently given. No selection of any kind was made and there was no attempt to make a record. One of the deaths occurred on the day the patient was admitted. No cases are excluded from the list. In the four years from 1893 to 1897 there were 563 cases, with 37 deaths, 6.57 per cent. mortality.

In the paper above referred to and on a former occasion, Osler, in referring to this plan of treatment, directs attention to the fact that La Roque, of Paris, advocated the use of purgatives in the treatment of typhoid cases in 1849, and is inclined to make it appear that the plan of treatment advanced by me is simply a revival of an old treatment. While I would not for a moment detract from whatever credit is due M. La Roque, yet I altogether fail to see how the empirical giving of purgatives in utter ignorance of the nature of the disease, at a time when no distinction was made between typhus and typhoid, and when the existence of bacteria was not even guessed at, can be made to appear identical with the eliminative plan advanced by me and based on the relatively clear light which the most recent facts of physiology and bacteriology have thrown upon the pathology of typhoid fever and upon the nature of bacterial processes in the body generally.

Reference is also made to what Professor Osler somewhat contemptuously calls the "gunshot" Woodbridge tablet. Examination into this method of treatment shows it to be simply an adaptation of the eliminative and antiseptic plan. At first the use of the calomel and antiseptic tablets was unaccompanied by any theory as to their action, but gradually the theory advanced by me,

setting forth the eliminative and antiseptic plan of treatment, has been utilized, until recently the title chosen by me for my first communication on the subject has been appropriated, and one reads of "the eliminative and antiseptic treatment of Woodbridge."

Why simply combining a purgative with antiseptics in the form of a tablet, after the theory and principles involved have been fully set forth, should be considered a special form of treatment, passes comprehension. One cannot easily see, either, the advantage of a scheme which make the attending physician simply an automaton.

Surely the choice of purgatives and antiseptics and the apportioning of them may with much greater advantage be left in the hands of the physician at the patient's bedside. Having a clear conception first of what he hopes to accomplish by them, he may then make his selection and arrange dosage from day to day, according to the requirements of the case, in a rational manner.

In conclusion I may be permitted to point out that my contention in the article in which the theory of the eliminative and antiseptic plan of treatment was first set forth, in the *Canadian Practitioner* of April, 1893, was that the profession had, to use Osler's words, been too fearful of the danger of purgatives in typhoid fever, that the danger had practically no real existence, and that the imaginary danger most effectually barred the way to treatment which appeared to be the logical outcome of the clearer ideas concerning the nature of typhoid fever, and in a general way, of bacterial processes.

So unorthodox a contention met with widespread opposition, as might have been expected, because it was diametrically opposed to the teaching found in every text-book on medicine. However, since that time opposition in this country has gradually disappeared, until now we have this virtual acknowledgment of the correctness of the position I then took, coming from one of its most pronounced and most powerful opponents.—*British Medical Journal.*

BIBLIOGRAPHY.

1. *Philadelphia Medical Journal*, January 1, 1898.
2. "Osler's Practice of Medicine."
3. *Medical Record*, March 10, 1894; September 14, 1895; 1896.
4. "Twentieth Century Practice," Vol. IX. "Diseases of the Liver."
5. Bouchard: "Auto-Intoxication in Diseases."
6. "Twentieth Century Practice," Vol. IX. "Diseases of the Liver."
7. *Ibid.*, Vol. IX., p 407.
8. "Eliminative and Antiseptic Treatment of Typhoid Fever." *Medical Record*, September 14, 1895.
9. *Medical Record*, 1896.
10. "The Theory of Eliminative Treatment in Typhoid Fever." *Medical Record*, 1896.
11. *British Medical Journal*, "Croonian Lectures, 1898."
12. "The Theory of Eliminative Treatment in Typhoid Fever." *Medical Record*, 1896.
13. *British Medical Journal*, July 9, 1898, p. 76.
14. *Medical Record*, September 14, 1895.
15. *Ibid.*, September 14, 1895.
16. *British Medical Journal*, July 2, 1898.
17. *Medical Record*, September 14, 1895.

URIC-ACID DIATHESIS.

[DIGEST.]

AT the recent meeting of the Association of American Physicians, held at Washington, D.C., in a discussion which took place on "Uric-Acid Diathesis," Dr. James Tyson, of Philadelphia, said that the uric-acid diathesis was hard to define. It was generally a weakened condition showing scant, highly-colored urine, which deposited a copious sediment of uric acid mixed with urates of oxalates. Later on there were some albumen and casts. This did not tell what the uric-acid diathesis was, but it gave certain points from which we might infer its presence. The tendency of the uric-acid diathesis might lead further on to uric-acid gravel and calculus, with consequent irritation of the urinary tract, perhaps with cystitis and nephritis. It might mean even more than this. It might cause depression of spirits. The pulse was low and there was marked lithæmia. Measures should be used to eliminate and get rid of this latter. Migraine might be another symptom of the uric-acid diathesis. The speaker related a case of migraine which was cured by large quantities of Célestine Vichy. Eye-strain and other reflex causes might be active factors. Again, the uric-acid diathesis might be the cause of endometritis, degeneration of the blood cells, and hypertrophy of the left ventricle; it might cause vertigo of the most distressing forms. Uric acid and its congeners played an important role. It was not known whether it produced glycosuria, asthma, bronchitis, and other such conditions, or whether it caused rheumatism and gout. The speaker did not think that uric acid had anything to do with rheumatism. Gout usually attacked well-to-do persons past forty who had lived high. Muscular rheumatism usually attacked younger persons. Haig thought that rheumatism could be cured by making the blood alkaline. The term rheumatic gout was not a happy one, and rheumatic arthritis also was an expression that should not be kept up. Another form of gout was found among the poor; it was not hereditary and it was not like the other form of gout. Mixed diet was necessary. Persons so affected should be well fed and they usually got well; food was better than medicine. Rheumatoid arthritis or deforming arthritis was a very distressing form of the disease. It occurred between the ages of twenty and thirty, and might be caused by grief or anxiety. It was doubtful whether epilepsy could come from uric acid. Uric-acid sediments had been found in diabetes, but with this the resemblance of the latter to the uric-acid diathesis ceased. The specific gravity was high, but this was usually from the sugar. Excess of uric acid could be caused by overstudy. It was not so common in this country as abroad. In a certain number of cases of supposed diabetes tests had shown uric acid to be the trouble.—*New York Med. Record.*

Orthopedic Surgery.

. . . IN CHARGE OF . . .
B. E. McKENZIE, B.A., M.B., AND H. P. H. GALLOWAY, M.D.

ARTHROTOMY OF KNEE.

O'CONNOR (*Amer. Jour. of Surgery and Gynæcology*, May, 1898) reports twenty-two consecutive arthrotomies of the knee for various conditions. The operation was done six times for traumatic hæmarthrosis, three times for traumatic serous effusion, once for chronic synovitis (six months' duration) following injury, twice for chronic rheumatic arthritis with effusion, four times for acute rheumatic arthritis, and six times for gonorrhœal arthritis. Details of each case are given, and the results appear to have been remarkable, a practically complete cure having resulted in every case. In some of the cases, notably those of rheumatic origin, other plans of treatment had been ineffectual.

All the joints were irrigated during operation with mercuric lotion, and in five cases it was daily repeated. Drainage was continued in each instance until the serous discharge had ceased and nothing but normal synovial fluid trickled from the wound. This period appears to have been usually from two to eight days, but in several instances the author has omitted to state the exact time in giving the history. Splints were used in six cases, but were early discarded, active motion being enforced as soon as the gauze drain was dispensed with. In no case was there any cause for post-operative anxiety. H. P. H. G.

ACHILLODYNIA.

GOLDTHWAIT (Boston *Med. and Sury. Journal*, May 27th, 1897) reports a case of this affection, of which too little has been written. The exostosis near the tendo-achillis was diagnosticated by means of palpation, but diagnosis was confirmed by a skiagraph. The tendo-Achillis was drawn aside, and under an anæsthetic a large bursa was opened, the lining membrane of which was found to be hypertrophied. Synovial fringes of the bursa were found which, being caught between the bone and the tendo-achillis, caused pain. Exostoses, as described by Albert, Brackett and others, were present. The symptoms disappeared for a while by rest, but an operation, removing the enlargement of the bone, was done with satisfactory results.—*Boston Medical and Surgical Journal.* H. P. H. G.

ARTHRODESIS IN TIBIO-ASTRAGALOID JOINT IN PARALYTIC JOINTS.

Hennerberg (Inaugural Dissertation, Berlin, 1896) describes four cases. In one, of a child eight and a half years of age, a firm anchylosis followed in nine weeks. In one, a child fifteen and a half years of age, a firm anchylosis was found at the end of three months. In a third, seventeen and a half years of age, after four months firm anchylosis was observed. In a fourth, success was obtained in a patient twenty years of age, but in this latter case anchylosis was observed five months after operation.

Kirmisson (*Revue Orthopædic*, 1896, No. 2) recommends careful laying bare of cartilaginous surface of bone with an ivory wedge placed between astragalus and calcaneum. He bases his conclusions recommending this method on fifteen operations.—*Boston Medical and Surgical Journal.* H. P. H. G.

TRIGGER-FINGER.

Jeannin (Inaugural Dissertation, Paris, 1895) describes as a cause of this deformity a narrowing of the tendon sheath of the flexors at some point. The treatment should usually be expectant, as the affection is not infrequently self-limited. When operative treatment is necessary, it should consist of a widening of the sheath and the complete removal of the obstacle.

Heiltorn (*Loc. cit. Erlangen*, 1895) had an opportunity of observing this affection upon himself. It was developed during his military service, and began with slight pain and a sense of fatigue following a drill at the manual of arms. On the metacarpo-phalangeal joint of the middle finger enlargement was to be felt. A smaller but similar one was felt on the little finger. Straightening of the finger was accompanied by a sharp, cracking noise, and bending with a duller crepitus. Recovery followed an operation, which remained permanent two years after the operation.—*Boston Medical and Surgical Journal.* H. P. H. G.

Dr. Montizambert, of Toronto, has been retired from his position as chief quarantine officer at Grosse Isle, and succeeded by Dr. Guay.

At the nominations of Medical Council Division No. 6, held at Owen Sound on November 8th, Dr. James Henry, of Orangeville, was re-elected by acclamation.

Dr. W. W. Dickson, Pembroke, has been elected representative of District No. 15, on the Medical Council of the College of Physicians and Surgeons of Ontario.

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J. J. CASSIDY, M.D.,
EDITOR,
69 BLOOR STREET EAST, TORONTO.

W. A. YOUNG, M.D., L.R.C.P.Lond.,
BUSINESS MANAGER,
145 COLLEGE STREET, TORONTO.

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Orthopedic Surgery—B. E. MCKENZIE, B.A., M.B., Toronto, Surgeon Victoria Hospital for Sick Children; Clinical Lecturer, Orthopedic Surgery, Toronto University; Assistant Surgeon, Ontario Medical College for Women; Member American Orthopedic Society; and H. P. H. GALLOWAY, M.D., Toronto, Orthopedic Surgeon, Toronto Western Hospital.

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Pediatrics—AUGUSTA STOWE GULLEN, M.D., Toronto, Professor of Diseases of Children, Woman's Medical College, Toronto.

Pathology—W. H. PEPLER, M.D., L.R.C.P.Lond., Toronto, Demonstrator of Pathology, Trinity Medical College; Medical Registrar, Toronto General Hospital.

Laryngology and Rhinology—J. D. THORBURN, M.D., Toronto, Laryngologist and Rhinologist, Toronto General Hospital.

Ophthalmology and Otology—J. M. MACCALLUM, M.D., Toronto, Assistant Physician, Toronto General Hospital; Oculist and Aurist, Victoria Hospital for Sick Children, Toronto.

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Editorials.

MEDICINE AND SUPERSTITION.

As will be readily acknowledged by readers of history, the practice of the healing art is as old as history itself among cultivated races. Even among races without a literature, such as the Zulus and Duallas of Africa, the medicine-man and the witch-doctor exercise their skill with more or less success; and, although their medicines are as primitive as their costumes, yet their ideas of professional decorum illustrate some of the natural foibles of more cultured physicians. For instance, they strongly resent the invasion of their preserves by outsiders. Recently, in Mashanoland, two

medical missionaries nearly lost their lives at the hands of native doctors, who found their incomes reduced by the cheap and efficacious treatment of the foreigners. After all, this is very human. A medical missionary and his wife, who, though educated and refined people, cannot earn a living at home, go to reside among savages and induce them to listen to religious teaching by curing their diseases. Their own salaries being guaranteed by a Board in Europe, they are not obliged to collect fees from their patients, who had previously been in the habit of paying for medical attendance, and so the missionary doctors get the credit of doing a great benefit for no apparent reward. Here legitimate medicine breaks a lance with barbaric superstition, but not exclusively for her own cause. This harnessing of medicine to the chariot of missionary enterprise may be a successful method of catching souls; but it is a bribe and an artifice, as far as religion is concerned, and unfair to medical science. Since the days of St. Luke, physicians have helped to advance the banner of the Cross, and some of them have been men of note, but not in the domain of pills and powders has their renown been won. The founder of Christianity did not utilize the medical skill of His day when He healed the afflicted. And it would seem more in keeping with His practice if the Christian churches of the present age would confine their efforts in healing disease to faith in His name and invocation of His power. When looked at from this standpoint the practice of the Christian Science cult has a certain appearance of consistency, and, whether the result in any given instance is good or bad, the practitioner and patient may at least claim to have the courage of their convictions.

While this may be conceded, it seems strange to a physician, that disbelief in the power of medicine should manifest itself among people of a considerable degree of cultivation, just at a time when medicine is being studied in a true scientific spirit. Had the Christian Science cult developed and reached its present magnitude in the days of the Puritan ascendancy in England, it would be more intelligible to us. Then, however, popular medical science was linked with the grossest superstitions. In the last century, says Darnell, "The European leech held in high esteem the ashes of a burnt witch for gout or fever. Ague, in Ireland, was to be cured by the sufferer swallowing a living spider. In Somerset, England, a large black spider was shut in a box and left to perish; and in Flanders, a spider is imprisoned in a walnut shell and worn

around the neck. In Lincolnshire a girl suffering from ague cuts a lock of her hair and binds it around an aspen tree, praying it to shake in her stead. The first violets of the season may be chewed or a three-colored cat kept in the house. Sir James Simpson knew of a case in Ross-shire, of a lad affected with fits. Mole's blood was given but failed, and a messenger was sent nearly a hundred miles for a bit of the skull of a suicide, which was scraped to dust, mixed with water and administered to the boy." Apart from popular superstition in treating disease, "The London Pharmacopœia, published in 1724, refers to unicorn's horn, human fat, human skulls, dog's dung, toads, vipers and worms as possessing real value in disease." Truly, a list to make a modern physician feel profoundly humble. Yet the very fact that these and other strange, unnatural remedies were employed by the people, is itself a proof of profound, unquestioning faith. Is faith in medicine less strong to-day, when the pharmacopœia has become less fantastical? The crowded hospitals and dispensaries, the numerous pharmacies, some of them even in departmental stores, the employment of physicians by numerous benefit societies, the increased number of registered physicians in Ontario, the operation of Provincial and Local Boards of Health, give a negative reply to this question.

It would take us too far afield to account fully in this article for the origin of the tenets believed in by the "Peculiar People." A wish to save doctors' bills and a too literal interpretation of St. James, chap. v., verse 14, "Is any sick among you? let him call for the elders of the church," etc., may, however, suffice. Parsimony will not explain the origin of the Christian Science cult, for according to the London *Outlook*, "Their consulting charges are heavy and the literature they foist upon their converts is highly priced." A reasonable explanation of their existence might be that as medicine more precisely limits the exercise of her powers and proclaims her weakness as well as her strength, so much the more will imposture raise its head to make the mystic and the unfathomable fill the gaps. To-day, as of old, men hate to die, and if medicine can offer no balm to heal their diseases, they cling in their despair to the veriest driftwood, that is tossed within their reach.

As practised to-day, Christian Science is a system of suggestive therapeutics, in the exercise of which the hierophant, generally a woman, claims solemnly to have a message from God to cure disease, and having thus prepared the mind of the recipient, suggests certain ideas, which may prove curative, if the disease is of such a nature that it can be benefited by suggestion.

While we denounce the blasphemy of the operator and pity the superstition of her dupe, it is permissible to think that in a disease, which may be influenced by hypnotism, viz., insomnia in a hypochondriacal invalid, no harm is done and some good may result. When medicine has said its last word, as in inoperable cancer or advanced tuberculosis, should the Christian Scientist be permitted to earn fees by humoring the whims of the wretched sufferer and filling his mind with vain hopes? By no means. Moreover, if a man suffering from pneumonia, a child with diphtheria, a woman with puerperal fever, should be treated by a Christian Scientist, medical and surgical treatment being stopped or never used, the hierophant is certainly guilty of a crime, should a fatal result occur, and it is the duty of the State to punish such a person for causing loss of life through superstitious practices and in defiance of scientific medicine. J. J. C.

PARISIAN METHOD OF DISINFECTING THE DOMICILES OF THE TUBERCULAR POOR.

At the Congress of Tuberculosis held at Paris last July, Mons. M. A. J. Martin, Inspector-General of the Health Department of that city, read a paper descriptive of the effort made to restrict human tuberculosis by procuring the disinfection of the lodgings occupied by tubercular patients. He endorsed the recommendations of the French Academy of Medicine, which favored: (1) The use of spittoons for the pocket or the apartment. (2) The disuse of sweeping and the use of a damp mop for cleansing floors. (3) Disinfection of the domicile after a patient's death or even after a short occupation of the premises by a tubercular patient, and also disinfection of body linen, bed linen, etc. After describing the present status of gaseous disinfection by sulphur or formaldehyde, he gave the preference to the washing or spraying of surfaces with antiseptic liquids. Washing or spraying, the latter, especially, if done in a careful manner by practised hands, possess the double advantage of securing the cleanliness of the place to be disinfected and of rendering it habitable in a relatively short period. The necessary displacement of the furniture also brings into notice portions of the room which too frequently remain in a flagrant condition of filth. Floors are scrubbed or mopped. Whitewashed walls and ceilings are retouched. Where the walls are papered antiseptic sprays of mercuric chloride and chloride of sodium are used, and a sterilizing of tubercular dust has been thus obtained,

equal to what has resulted from a lengthy contact of the surfaces, of a room with an antiseptic gas. The principal antiseptics used are: Fresh milk of lime, solution of chloride of lime, 100 grains of commercial chloride of lime to 1,200 grains of water, then, after filtration, diluted to a strength of 1 in 10, solution of commercial formol, 5 grains to the litre of water, solution of carbolic acid, 5 per cent., solution of cresyl, 5 per cent., wood vinegar, solutions of soap, and especially the solution of mercuric chloride mixed with chloride of sodium, which, as Miquel has recently shown, procures the definite and immediate sterilizing of tubercular sputa, owing to the property possessed by the chloride of sodium of dissolving the insoluble albuminate of mercury.

The disinfection of domiciles for tuberculosis has now been in operation in Paris for six years. The number of disinfections asked for or accepted was 4,541 in 1892; 8,128 in 1893; 7,514 in 1894; 9,225 in 1895; 9,330 in 1896; 10,194 in 1897, and 6,970 in the first half of 1898. These figures will be increased during the second half of the present year, because the sanitary authorities of Paris intend to extend, experimentally, to an entire *arrondissement* of the city the preventive measures which have been applied systematically to the tubercular poor who have been cared for in their own homes. Over two years ago the French Commission on tuberculosis had recommended a certain number of preventive measures to be put in force in the case of poor people treated in their own homes. Closely adhering to the instructions of the Commission, the following plan of action was adopted: (1) Two spittoons were placed in the domicile of each patient. After different trials the department decided in favor of a colored glass article, flat-bottomed and formed of two opposite cones; it is made so that the fingers are protected against soiling by the expectoration, which drops easily into the contained liquid, and it is steady enough to be placed near the patient who, in many cases, is often left alone in his room. It seems to answer better than the heavier articles formerly in use, for which the patients substituted a wash-basin or enamelled spittoons. (2) A certain amount of liquid should be left in the spittoon. This regulation has been generally observed, but in a great many cases the patients have objected to carbolic acid on account of its disagreeable odor increasing their cough. Plain water is therefore used instead. (3) The spittoon should be cleaned every day by putting it into cold water, which is subsequently raised to the boiling point. The physicians, however, unanimously recommend that the spittoons should be emptied into the water

closets and then rinsed out. The department agreed to this innovation, being convinced that, in the homes of the poor, it is often impossible to obtain the cleansing of a spittoon with boiling water, as frequently the necessary kitchen utensils are lacking and for the greater part of the year a fire is not available. (4) Soiled linen ought to be steeped in boiling water for five minutes. For reasons similar to those last given, in nine-tenths of the cases this precaution could not be observed. Where conveniences were wanting the department recommended that the soiled articles be put aside, so that they could be disinfected by the municipal sanitary service. This was done and without much trouble, save in one of the quarters of Paris, where the tubercular poor had no linen to wash. The Public Assistance will assuredly interfere to provide for such a lack of clothing. (5) After death, cure or departure, the disinfecting service performed the usual offices without much difficulty. The disinfectors go at least once a week to the domicile of each patient. They exchange disinfected linen for soiled linen, which they carry off to the disinfecting machine; the water closets and utensils used by the patients are cleansed with antiseptic fluids.

The greatest obstacle to practical disinfection has been the notification of the patient's disease to the authorities. Soon after notification the patient was considered as if he were a leper and, in some instances, was expelled from his lodgings. Thus the disinfecting operations were not regularly and completely carried out except in a little over 50 per cent. of the cases. It was the same after a death. These difficulties, however, were noticed only in some places. The spittoons and disinfection were accepted and even asked for in three *arrondissements*; in two other *arrondissements*, however, some ignorant or evil-minded neighbors caused the failure of the municipal preventive measures. "The spittoon is a great success," says one of the physicians who have taken most interest in introducing it, "because it collects all the contagious droppings which, formerly, were discharged at the caprice of the patient, and most frequently on the floor of his room. Our tubercular cases accept freely the spittoons and the weekly cleansing of the water closets. The sanitary service does the work with great regularity."

The regular disinfection of consulting rooms, houses of refuge, civic offices, or places frequented by the tubercular poor, is done without difficulty. Whenever a tubercular patient is admitted into a hospital, notification by telephone is sent to the civic health authorities, who immediately dispatch the disinfectors to do the

necessary work at his vacated domicile. These officials are not, in all cases, permitted to do this office, for the simple reason that the transmission of tuberculosis from one person to another is still very far from being believed in by the Parisian people.

Such are the measures, which will be applied systematically and as fully as possible, in one of the *arrondissements* of Paris and, doubtless, later on, in others. Joined to disinfection, directly asked for, accepted after a death has occurred or during the course of a patient's illness, as well as disinfection of lodgings, after location and before inhabitation, which is asked for more and more every day, the sanitary resources of the French capital against tuberculosis will be very much strengthened and improved. J. J. C.

CORONERS' INQUESTS.

"LEGISLATION has from time to time been enacted with a view to regulating coroners' inquests, but the complaint is still heard that some of the coroners are too free with their warrants and that there are far too many post-mortem examinations. The intention of the law is that a coroner's inquest shall be held wherever, as the statute expresses it, 'there is reason for believing that the deceased did not come to his death from mere accident or mischance, but came to his death from violence or unfair means, or culpable or negligent conduct of others, under circumstances requiring investigation by a coroner's jury.' An inquest thus becomes proper in every case of homicide, and in every case of death under circumstances of suspicion which are not made plain on investigation, such as the law contemplates shall be made by a coroner before summoning a jury. No exact line can be drawn with regard to deaths by accident or suicide, but generally it may be said that, where it is already plain that no legal responsibility attaches to anyone but the deceased, no inquest ought to be held. This test, unfortunately, is not uniformly applied.

"With reference to post-mortem examinations, the law provides that the coroner may at any time before the termination of the inquest direct such an examination by a medical practitioner, and to cover cases of more than ordinary obscurity it is provided that on request of a majority of the jury the coroner may direct a post-mortem by two medical practitioners. The intention, of course, is that post-mortem examinations shall only be held in cases where the cause of death is not plain. If a man falls down an elevator shaft, or is run down by a trolley car in the presence of witnesses, it is not necessary to cut up his body to ascertain the cause of death. Nevertheless, it is the practice of some coroners to order post-mortem examinations in every case where they hold an inquest, and a few go so far as to get the jury to consent to a second medical man being called in to assist, even in cases where

the cause of death was perfectly plain before the coroner appeared upon the scene.

"These things give color to the suggestion that inquests are sometimes held and post-mortems ordered rather for the fees they carry for the coroners and the medical men who may be called in than for any public purpose they serve; and it is just a question whether, in the case of Toronto at all events, the time has not arrived for putting an end to the present chaotic and sometimes scandalous state of things by appointing a coroner for the city at a fixed salary. Many of the present coroners are able and worthy men in their profession, but the duties of a coroner are essentially those of a judge, and the coroner should preferably, therefore, be a man with a legal training. Such an officer would save the city every year the amount of his salary several times over, and we would cease to hear of races between coroners to get their warrants filed, or of this or that coroner's 'pull' with the police."

The above editorial we quote verbatim from the *Globe* (Toronto). As most playwrights are satisfied with one murder to appease the gods, so the majority of editorial writers are satisfied with one grievance, making it the pivot on which they turn their pen-and-ink remarks. But this is a progressive age; old methods are now voted flat, stale, and unprofitable; the up-to-date play, to appeal to the gods, must electrocute the villain, and "most foully murder" an innocent man, to bring plaudits, and wring tears from pit and gallery. And so the editorial writer of to-day, even upon the morbid subject of "Coroners' Inquests," must unfold a triple grievance to make his article thoroughly enjoyable reading for the curious public. We hereby tabulate the complaints asserted therein against the Toronto coroner:

1. The coroner orders too many post-mortems, and holds too many inquests.

2. His relations with the police are too friendly, and he thereby has a "pull" with them.

3. There are too many coroners.

In passing let us look at the coroner himself, the august personage who is so unceremoniously dealt with. "In days of old when knights were bold," the coroner was "ordered" by the Statute of Westminster the First to be none other than "a lawful and discreet knight," and was forbidden to take reward under pain of great forfeiture to the king. One instance is recorded where a coroner was removed from office for "insufficiency of estate." However, a few years later, lands to the value of £20 per annum were considered "foot of land enough to possess" to satisfy the requirements as to estate in the case of a coroner. Under the old law the

appointment was held for life, but vacated by the coroner being made a sheriff, or the Lord High Chancellor had power to remove any coroner for inability or misbehavior in his office.

To return to the charges made, we do not think this once grand but now common-place person, the coroner (who, like other public officers, now receives filthy lucre for his services), orders too many post-mortems nor holds too many inquests. In the first instance, as a respected and respecting medical man he knows his business, the requirements of the case, his own status, and that of his fellow practitioners too well to fill their hands with bribes, such as unnecessary post-mortem fees.

In the second instance it is required that the coroner, ere holding the inquest, take the statutory oath, in which he swears that the person died of other than accident or mischance; consequently he cannot, in all honesty, hold uncalled-for inquests. We feel this charge to be untrue. The second charge, that the coroner has a "pull" with the police, is unfounded as far as the majority of Toronto's coroners are concerned. If it is known to be true of any one of them, the charge should have been laid at his door, and not sweepingly asserted.

The third grievance, that there are too many Toronto coroners, is a matter of opinion. Some are busy most of the time; others are busy some of the time, none are otherwise unoccupied, nor starving, nor asking alms because they are coroners. This city is growing rapidly, and cases requiring this officer's attention are multiplying. When a man is proficient in, and has kept up his study of medical jurisprudence, would it not be a pity if he never had the chance to get writer's cramp, and speaker's sore throat, fulfilling his destiny as a presiding coroner?

True, the city might save money by having one lonely coroner without any one to put him in a vulgar hurry by "racing" him (as averred) to headquarters to file his lonesome warrant. True, the city may need to save money to recoup itself for its lavish expenditure in this connection in the past, for then—it must have been in the glacial period—the city built the morgue, you know.

W. A. Y.

THE DECLINE AND FALL OF OLD TRADITIONS.

THERE was a time when the proceedings of academic bodies were fraught with a certain austere dignity which held in awe the cruder laity. Though less opulent perhaps than some other classes,

there were certain devices to which men of learning would not stoop, certain things at which they would stop; which in some vague way gave them an ascendancy over the more sordid classes referred to, who stoop to anything and stop at nothing. But the old niceness seems to be on the wane of late, and finding itself in a more spacious field, a cheerful approachment has been observed in the election methods of the academic class to the election methods of a municipal campaign. The recent university elections, as a case in point, were strikingly aldermanic, and yet upon closer scrutiny the parallel hardly seems quite just—to the alderman. For while the alacrity with which the university candidates canvassed for themselves had about the same dignity as an aldermanic contest, it was hardly as fair an election. The municipal electors at least know who is in the field, and on a given day cast their votes decently and in order; while in university politics (for it seems to have come to that) the candidates themselves go about, weeks before the time, importuning each voter with blank ballot forms which they carefully gather up in person when signed. The more self-respecting are forced by the tactics of the unscrupulous to resort to similar measures, though sorely against their better understanding. In the meantime the easy-going and unwary, cajoled with this or that gew-gaw, or menaced with the dire vengeance of this or that secret society, are thus sometimes induced to commit themselves before they even know all who are in the field, and often before they have received any official notification of the impending election from the University itself.

When things have come to such a ludicrous and mischievous pass it would certainly seem that it was time for the universities themselves to actively interfere, and correct, as the academic authorities alone can, a system of abuse which outrages the gracious traditions of learning and courtesy. E. H. S.

CHRISTMAS GREETINGS.

We have endeavored to fulfil our promise by inserting in this issue a few glimpses of Toronto. Our efforts may not have been as successfully carried out as we would wish, but to many readers, especially those living at a distance, we hope, enhanced by the glow of the Christmas-tide fire, and under the soothing influences of a friendly hookah, a view of what was home in student days, the days of Old Grimes and Auld Lang Syne, may recall a happy memory. To all we wish a jolly Christmas and a happy New Year. W. A. Y.

A Christmas Canticle.

DARKLY through the awful gloom
Thunders now a nameless doom;
On the hills the camp fires glare
Wildly in the blackened air,
And the Old Fear all have known
Hisses in our ears alone.

From the temple's dark alcove
Men of Athens cry to Jove,
By the Nile's most sacred wall
Frantic priests to Isis call;
Only back through countless years
Mocks the music of the spheres.

Out on pastures far away,
Kneeling shepherds sadly pray,
When, behold! a golden star
Rolls in molten light afar,
And along the sylvan hills
Night undimmed with glory fills.

Gathering white on Heaven's rampires,
Sweetly sing celestial choirs,
For to-day, sublimely born,
Christ has sanctified the morn:
From their thrones our tyrants hurled,
Soothed our woe, and saved the world.

—E. H. Stafford.

TORONTO, FROM THE BAY.

YONGE STREET DOCK.

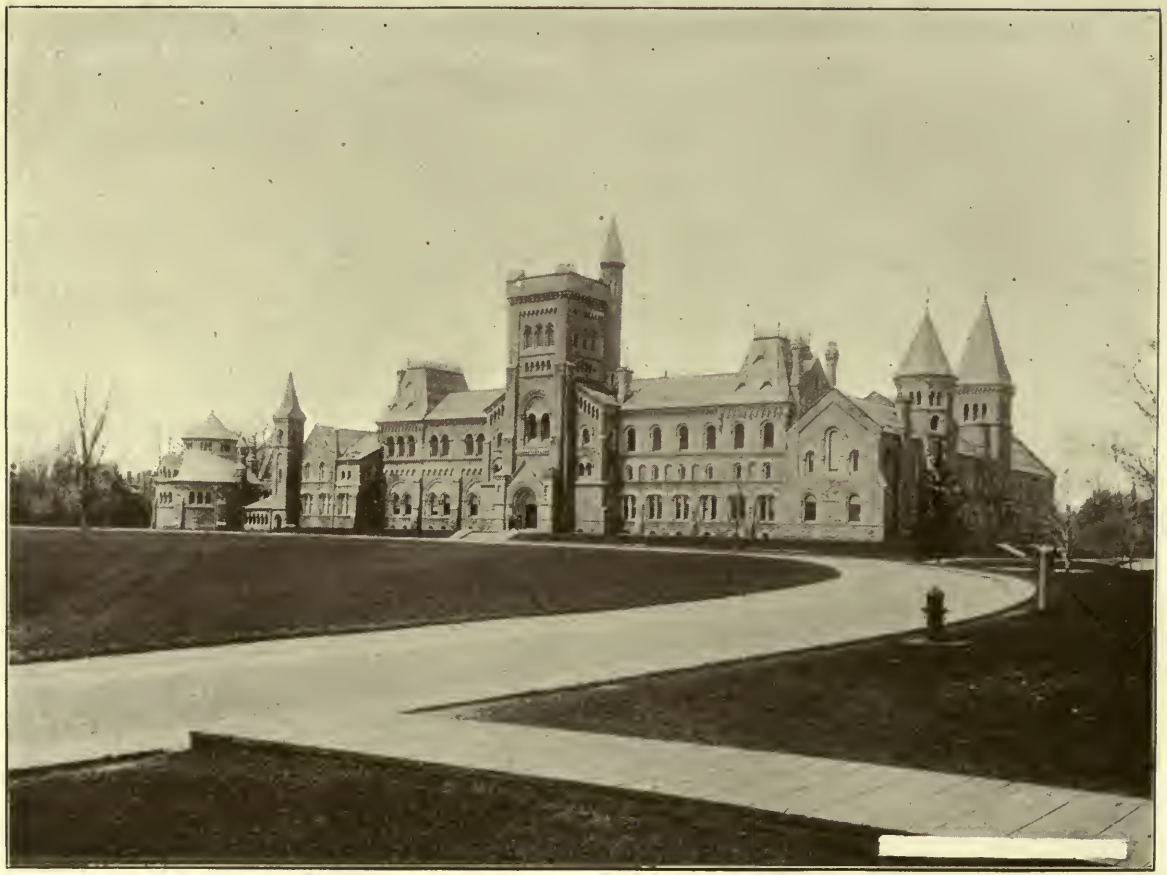
BIRD'S-EYE VIEW OF TORONTO (South-West)

BIRD'S-EYE VIEW OF TORONTO (North-West).

BIRD'S-EYE VIEW OF TORONTO (North).

BIRD'S-EYE VIEW OF TORONTO (East).

PROVINCIAL PARLIAMENT BUILDING.



TORONTO UNIVERSITY.

VICTORIA UNIVERSITY.

QUEEN'S PARK.

McMASTER UNIVERSITY.

OSGOODE HALL, THE LAW COURTS.

UPPER CANADA COLLEGE.

KING AND YONGE STREETS.

KING AND CHURCH STREETS.

TORONTO STREET.

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YONGE STREET, NORTH FROM TRADERS' BANK.

KING STREET (West from Yonge Street).

DOMINION BANK.

ST. ANDREW'S.

METROPOLITAN METHODIST CHURCH.

BOND STREET.

ST. GEORGE STREET.

SHERBOURNE STREET.

JARVIS STREET.

DRIVEWAYS IN HIGH PARK.

PICNIC GROUNDS, HIGH PARK.

ROSEDALE DRIVE.

ROSEDALE RAVINE.

HORTICULTURAL GARDENS.

ISLAND PARK.

Correspondence.

The Editor cannot hold himself responsible for any views expressed in this Department.

THE "IRRIGATION TREATMENT."

To the Editor of THE CANADIAN JOURNAL OF MEDICINE AND SURGERY:

MY DEAR DOCTOR,—In view of the well-established fact that you always strive to present your readers with the newest in everything, it is surprising to find pages 295 to 309 of your November, 1898 issue, occupied by what purports to be a copy of my article originally published in the *New York Medical Record*, for June 5th, 1897.

The article you reproduce has been entirely superseded by another published in the *International Journal of Surgery* for September, 1898, which contains the result of sixteen months' more experience.

Two pages of rambling, incoherent and misrepresenting addition to my article, of whose authorship I know nothing, convince me that you have been imposed upon in the whole matter. And, when an article of mine is unscrupulously used for the purpose of deliberate misrepresentation, I deem it my duty to call your attention to it.

To show that neither you nor I have been guilty of endeavoring to deceive your many readers, I shall be glad to send them, at my expense, a copy of my recent article on the "Irrigation Treatment."

Yours very truly,

New York, Nov. 7th, 1898. FERD. C. VALENTINE

[It is quite unnecessary for us to say that we greatly regret the above, as had we known that the entire article which we published did not proceed from Dr. Valentine's pen (of whose ability almost everyone is aware), or at least that the 2-page addition was not written by him or under his guidance, we would never have allowed its publication.—EDS.]

POSTPONEMENT OF PAN-AMERICAN MEDICAL CONGRESS.

CINCINNATI, *Nov. 5th, 1898.*

MY DEAR SIR,—I have the honor to announce that in April, 1898, I received from Dr. José Manuel de los Rios, Chairman of the

Committee on Organization of the third Pan-American Medical Congress, a request that, in consequence of the then existing rebellion in Venezuela, no definite arrangements be made at that time relative to the meeting of the Congress previously appointed to be held in Caracas in December, 1899.

The following communication relative to the same subject is just at hand:

CARACAS, *Sept. 24th, 1898.*

DR. CHARLES A. L. REED,

Secretary of the International Executive Commission, Cincinnati, Ohio.

DEAR SIR,—After having sent my communication dated April last, I find it to be my duty to notify you that, although the considerations pointed out in it have already ended, our country has been scourged by small-pox which has taken up all our physicians' activities and time, depriving them of going into scientific works. And, as that state of mind of our people and government after such calamities as war and epidemic, would greatly interfere with the good success of our next meeting, I beg leave to tell you, in order you will convey it to the International Executive Committee, that our Government and this Commission would be grateful to have the meeting which was to take place in Caracas in December, 1899, adjourned for one year later. I am, Dear Doctor, yours respectfully, THE PRESIDENT.

(Signed) DR. JOSE MANUEL DE LOS RIOS.

In accordance with the request of the Government of Venezuela and of the Committee on Organization, the third Pan-American Medical Congress is hereby postponed, to meet in Caracas in December, 1900.

For the International Executive Commission.

CHAS. A. L. REED, *Secretary.*

A DISCLAIMER.

DR. W. H. B. AIKINS wishes it stated that, though he has retained his grip on the medical electorate of Toronto University, the operation did not involve the use of massage or digital pressure of any description, Masonic or otherwise.

Dr. Aikins also desires to say that the *Canadian Medical Review* has not been sold to Drs. Wright and King, but that he and the members of his staff have united with the staff of the *Canadian Practitioner*, and that in future the new journal will be known as the *Canadian Practitioner and Medical Review*. We extend congratulations and wish our confreres success. W. A. Y.

The Physician's Library.

Therapeutic Suggestion in Psychopathia Sexualis. By Dr. A. Von Schrenck-Notzing. The F. A. Davis Co.

The present work should be read in conjunction with the earlier treatise of a somewhat similar title, by Dr. R. Von Krafft-Ebing. The two certainly form a scathing comment (though unintentionally perhaps) upon the pernicious practices of *fin-de-siecle* civilization: a comment as useful to the physician and criminologist of to-day as to the historian and sociologist of to-morrow.

A simple physiological function (procreation)—thanks to the prejudices of the early Fathers who made a virtue of celibacy, has been gradually separated from its correct place in the life of the human race and invested with a strained and fatuous religious significance. Veiled, far-fetched and askew in the stilted fabric of modern society, the ancient relationship of the sexes has lost all its naturalness, and instead of being regarded now as simply one of the primitive instincts of the race, it has been branded by the theologians as in itself a form of crime against decency—a foul defect to hold in secret shame. By the pronouncement, however, of a certain sacerdotal *Abracadabra* on the part of the ecclesiast the instinct may afterwards be safely indulged; but without such a mystic ceremonial of purification the expression of this instinct is superstitiously claimed by them to be indecorous and even criminal. The ecclesiastic having thus in an age of credulity taken possession of one of the fundamental functions of the species, increased his power enormously by restricting and regulating its practice to suit his own ends. The species suffered.

The early association of the sexes originated in this function of procreation, but the partnership under the benign influences mentioned has developed for the most part into a form of corporeal barter, degrading and monstrous, in which procreation is the last thing thought of and the least thing wished. However, this is one of the keys of ecclesiastical power, and it simplifies political calculations. Should the human race (the hewers of wood and drawers of water) throw down their axes and buckets to-morrow and decide to live naturally, the chaos so often prophesied would certainly take place. But in Nature a condition of similar chaos occurs annually at the approach of the vernal season, and at much longer intervals the same alternation of order and confusion may be noticed in history. The phenomenon is manifestly a necessary factor in any condition of progress. It certainly is in the realm of nature and the race is only a humble part of nature and amenable to her laws.

Furthermore, every departure from nature breeds disease, and the wider the departure the more deadly the disease. In the contemptuous abuse of this simple procreative function the departure from nature has been very wide, and the disease of the race, heralded as it is by many sinister harbingers, bids fair to be a very grave one.

It is with these first degenerative symptoms that the present writer dwells. Dr. Schrenck-Notzing assumes a conservative attitude, and while the work under consideration might be very acceptable to the salacious, it was certainly not written especially for them—an unblushing practice with certain pornographic writers who enjoy considerable repute. The methods of therapeusis described will prove in some cases efficacious, but cannot be relied upon to always succeed in the more persistent forms of perversion, which occur among the technically insane. He refrains from suggesting marriage (a vile and thoughtless crime often committed by practitioners) as a panacea for all disorders of this class. Nothing could be more cruel or reprehensible: nothing more unjust to the normal contracting party. The tainted half-insane degenerates of society are the irreclaimable refuse of the species, and the pure and unpolluted should not be immolated in this brutal and most flagitious manner, in the chance hope that some such charnel-house marriage might possibly prove of some slight benefit to the degenerate. Fanatics ever resort to the cheerful task of cleansing the filthy instead of keeping the pure uncorrupt.

E. H. S.

A Pocket Medical Dictionary, giving the Pronunciation and Definition of the Principal Words in Medicine and the Collateral Sciences. By GEORGE M. GOULD, A.M., M.D., author of "The Illustrated Medical Dictionary," "The Student's Medical Dictionary," Editor Philadelphia *Medical Journal*, etc. A new edition, entirely re-written and enlarged, including over 21,000 words. Philadelphia: P. Blakiston's Son & Co. 1898.

With the experience of Dr. G. M. Gould in dictionary work, it is hardly necessary that we do more than announce that he not only invented this style of book himself, but was the one who introduced all the new features contained in it. Every word is pronounced clearly and simply, a large number specially so. The definitions are most concise and easily understood, all rare and obsolete words are left out as being unnecessary, many valuable tables are introduced, which alone are worth the price asked for the book, and the book, being made of a specially thin, yet a good quality of paper, is most acceptable in every way.

American Pocket Medical Dictionary. Edited by W. A. NEWMAN DORLAND, A.M., M.D., Assistant Obstetrician to the Hospital of the University of Pennsylvania; Fellow of the American Academy of Medicine, etc., etc. Containing the pronunciation and definition of over 26,000 of the terms used in medicine and the kindred sciences, along with over sixty extensive tables. Philadelphia: W. B. Saunders. Toronto: J. A. Carveth & Co.

It is necessary for a medical dictionary nowadays, which has come to be almost a *vade-mecum* to the busy practitioner, to be of such a size as to be easily carried around. In Dr. Dorland's pocket dictionary, we have one which includes between 25,000 and 30,000 medical terms and names, pronounced and defined in a clear distinct manner. It is most complete and should meet with a large sale.

The Physician's Visiting List (Lindsay & Blakiston's) *for 1899.* Forty-eighth year of its publication. Philadelphia: P. Blakiston's Son & Co.

This list is now too well known to make it necessary to state any more than that it is once again on sale for the coming year. The regular edition can be procured for from twenty-five to one hundred patients per day or week, and also has a special memoranda page. A perpetual edition can also be purchased, if so desired, without any dates and with special memoranda pages. This edition can be started at any time and used until full. A monthly edition, where the name of the patient need be written but once a month, is also to be had. W. A. Y.

IN Saunders' Series of Question Compends is a compact little work, on "Essentials of Materia Medica and Therapeutics," by HENRY MORRIS, M.D. This little book is admirably adapted for the use of students, being arranged according to the physiological action of the several drugs in such a way that there is no difficulty in finding the drug one requires or its therapeutical action. This is the fifth edition, and has been revised and enlarged. It is published by W. B. Saunders, of Philadelphia. J. A. Carveth & Co. are the Canadian agents. A. J. H.

IN the review of Vol. II. of "Sajous' Annual and Analytical Cyclopedia of Practical Medicine," appearing on pages 341 and 342, November issue, by a typographical error, we are made to say "Bromide of Ethyl *of* Diphtheria" in place of "Bromide of Ethyl *to* Diphtheria," meaning that Vol. II. commences with articles coming under the letter B, giving in each instance the very latest facts and information on each subject, and ends with those coming under D. Sajous' Cyclopedia of Practical Medicine has, we understand, even thus early met with a larger sale in Toronto than any other similar book ever has. This must be a source of great pleasure to the author, as well as the publishers. And why is this the case, we ask? That is easily answered—Because it deserves it. Never before, we venture to say, has a book been attempted on such a system where every chapter, yes, every page, is not only up-to-date, but contains the latest facts on each subject *right up till the day that particular chapter went to press.* W. A. Y.

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